Lectures
ON THE
PHYSIOLOGICAL PATHOLOGY OF THE BRAIN.

Delivered at the Royal College of Physicians of London, July, 1876,

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LECTURE III.—PART IV.

ON PTOSIS AS AN EFFECT OF BRAIN DISEASE.

A lesion in almost any part of the brain can produce a paralysis of the upper eyelid—A lesion of the corpus striatum can cause ptosis either on the same or the opposite side—A lesion in the pons Varolii, the medulla oblongata, or the cerebellum, can produce ptosis either on the same or on the opposite side—Lesions in one half of the brain can produce ptosis in both eyes—Ptosis generally appears in one eye only in cases of even considerable alteration of one of the crura cerebri, while according to admitted theories it should then appear in both eyes.—Conclusions.

2. *A lesion in almost any part of the brain can produce a paralysis of the upper eyelid.*—This proposition, abundantly sustained by facts, is of great importance, as, if it be proved that a lesion in many and widely different parts of the brain can produce paralysis in a small muscle of the eye, it will be quite certain that we must reject the admitted view that paralysis of cerebral origin is always due to the loss of function of the part altered by disease or injury, and also that we must accept the view that paralysis, as I maintain, is, in certain circumstances, due to some influence exerted by the diseased part on other parts of the nervous centres. I begin my demonstration by facts showing that disease of the convolutions in very different parts can produce ptosis. I will first mention the cases which have led Landouzy to admit that the psycho-motor centre of the levator palpebræ superioris is located in some convolutions on or near the antero-temporal sulcus. First, Grasset[1]: inflammation of two convolutions bordering on that sulcus on the right side; no paralysis, except of the left upper eyelid. Second, Maurice Raynaud[2]: patches of inflammation in the left paracentral convolution, and in the posterior horn of the left hemisphere; ptosis in right eye. Third, Landouzy[3]: tumour of the size of a pea under the pia mater, in the middle part of the right upper parietal lobe; ptosis in left eye. Fourth, Dussaussay[4]: abscess in cortex cerebri, middle of left parietal lobe, near the fissure of Rolando; right upper eyelid and right limbs paralysed. Fifth, Landouzy[5]: softening of many parts of the right hemisphere, especially of many convolutions of the parietal and frontal lobes and of the white substance under them; left ptosis and hemiplegia. Sixth, Dreyfus-Brisac[6]: considerable atrophy of the posterior extremity of the occipital lobe; no paralysis except left ptosis. Seventh, Joanny Rendu[7]: inflammatory softening of the lower third of the right ascending parietal convolution and of a very small part of the neighbouring convolution behind it; considerable ptosis and hemiplegia on the left side. Eighth, H. de Boyer[8]: obliteration of the right Sylvian artery; softening of temporal convolutions extending to the antero-temporal sulcus, the fissure of Sylvius and the white substance under them; many other alterations; left ptosis and hemiplegia.

To these cases, all given by Landouzy, I will add the following:—Ninth, Wernher[9]: fracture of the right temporal bone; the two marginal convolutions bordering on the fissure of Sylvius were crushed, and the surface of the frontal lobe, covered with blood, was softened; slight paralysis of the right upper eyelid and of the masticatory muscles. Tenth, Dr. J. Hughlings Jackson[10] the second and third right frontal convolutions, close by the furrow of Rolando, were mere bags of semi-fluid matter; another similar cavity existed just above the ventricle, and near the longitudinal fissure; very slight ptosis of the left eye; left hemiplegia. Eleventh, C. Gerhardt[11]: reddish-grey softening of parietal convolutions near the posterior lobe on the left side; ptosis of right eyelid. Twelfth, Andral[12]: tumour, size of a large walnut, at the anterior extremity of the left hemisphere between the dura mater and the convolutions; considerable ptosis and hemiplegia on the right side. Thirteenth, Mr. Little[13]: fracture of the right frontal and parietal bones: anterior two-thirds of right hemisphere covered with pus; drooping of the left eyelid; left hemiplegia. Fourteenth, Andral[14]: convolutions of right frontal lobe flattened, of a whitish-rose colour and softened; left upper lid covered half the globe of the eye; temporary left hemiplegia. Fifteenth, Professor Charcot and Dr. Pommeau[15]: capillary apoplexy in several convolutions of the right frontal and parietal lobes; white softening of the intraventricular corpus striatum; drooping of left upper eyelid.

These facts clearly show that lesions in the most various parts of the surface of the brain can cause ptosis. Even the cases collected by Landouzy, with the purpose of showing that the centre for the voluntary movements of the levator palpebræ superioris is in one or two convolutions near the hind extremity of the antero-posterior sulcus, are most of them not at all in harmony with that view. If we notice the locality of the lesion in the cortex cerebri in those cases, we find that in some it was in the anterior lobe, in others in the parietal or in the occipital lobes, and in a few only in the back and upper parts of the temporal or sphenoidal lobe, where it should always have been.

A more or less considerable lesion of the frontal, middle, or posterior parts of the white substance of the brain can, like lesions of the convolutions, produce ptosis. I will merely say that such cases have been put on record by Dr. W. Baly.[16] Baréty,[17] Bright,[18] Andral,[19] Chizeau,[20] Duplay,[21] Romberg,[22] Thouret,[23] and many others.

Lesions of the corpus striatum together with parts of the middle lobe have also produced ptosis. Dr. J. H. Bennett,[24] Bravais,[25] and Lerminier[26] have published such cases. Lesions of the corpus striatum alone or of the optic thalamus alone, or of the two ganglia, have also been found by many writers to cause ptosis. I will only quote the following observers as having recorded such cases: Lallemand,[27] Chouppe,[28] Pitres,[29] Rostan,[30] Gintrac,[31] Troschel,[32] J. W. Ogle,[33] Morgagni,[34] Parchappe[35]. The details of these cases are extremely important, because they clearly show that a lesion of the optic

1 Progrès Médical, p. 406. Paris, 1876.
2 Bulletins de la Société Anatomique, 1876, p. 431.
3 Ibid., p. 146. 4 Ibid., pp. 753, 777.
5 De la Blépharoptose Cérébrale, p. 8. (Extrait des Archives de Médecine. Paris, Août, 1877.)
6 Bulletins de la Société Anatomique, 1877, p. 158.
7 Lyon Médical, Avril, 1877, p. 448.
8 Bulletins de la Société Anatomique, 1877, p. 271.
9 Hayem's Revue des Sciences Médicales, vol. i. 1873, p. 651.

10 The Royal London Ophthalmic Hospital Reports, vol. v., part 1, 1866, p. 71.
11 In Hayem's Revue des Sciences Médicales, vol. vii., 1876, p. 633.
12 Clinique Médicale, 4ème édit. (Paris, 1840), vol. v. p. 2.
13 Clinical Lectures and Reports of the Medical and Surgical Staff of the London Hospital, vol. iii., 1866, p. 212.
14 Loc. cit., vol. v., p. 405.
15 In Pommeau's work, Du Rôle de l'Inflammation dans le Ramollissement Cérébrale (Paris, 1866), p. 34, et seq.
16 Quoted in an article on Abscess of the Brain, in Reynolds's System of Medicine (London, 1872), vol. ii., 2nd edit., p. 584, No. 14.
17 Mémoires de la Société de Biologie (Paris, 1873), p. 145.
18 Reports of Medical Cases, vol. ii., part 2, p. 290, case cxxxviii.
19 Two cases: one, p. 303, the other p. 309, loc. cit., vol. v.
20 Quoted by Lallemand, loc. cit., vol. i., p. 402.
21 Journal Hebdomad. de Médecine, &c. (Paris, 1826), vol. iii., p. 165.
22 Loc. cit., Sieveking's translation, vol. ii., p. 432.
23 Quoted by Gintrac, Cours Théorique et Clinique de Pathol. Interne (Paris, 1869), vol. viii., p. 252.
24 Pathol. and Histol. Researches on Inflammation of the Nervous Centres (Edinburgh, 1843), p. 11.
25 Quoted by Lallemand, loc. cit., vol. ii., p. 462.
26 Annuaire Médico-Chirurgical. (Paris, 1819), p. 219.
27 Two cases, loc. cit., vol. i., p. 39 and 138.
28 Bulletins de la Société Anatomique (1874), p. 559.
29 Mémoires de la Société de Biologie (1876), p. 103.
30 Recherches sur le Ramollissement du Cerveau (Paris, 2nde édit., 1823), p. 354.
31 Loc. cit., vol. iv., p. 264.
32 Quoted by Ladame, Symptomatologie und Diagnose der Gehirngeschwülste (Würzburg, 1865), p. 175. In this singular case the limbs were paralysed on the side of a tumour in the optic thalamus, while ptosis was on the opposite side.
33 Transactions of the Pathological Society (London, 1853), vol. iv., p. 23.
34 Recherches Anat. sur le Siège et les Causes des Maladies (Paris, 1820), vol. i., p. 308.
35 Traité de la Folie, obs. 295, p. 312.

thalamus alone, or of the corpus striatum alone can, like a lesion of these two ganglia together, produce *cross* ptosis. I have already mentioned facts establishing that a lesion of these parts, and especially of the corpus striatum, can produce direct ptosis. So that we find that the basal ganglia can cause ptosis either on the same or on the opposite side. This leads naturally to the facts I will now mention.

3. *A lesion in the pons Varolii, the medulla oblongata, or the cerebellum, can produce ptosis, either direct or crossed.*—Ptosis appearing from a lesion located behind the place of origin of the third pair of nerves is very much like a paralysis of the upper limbs arising from disease of the spinal marrow in the dorso-lumbar enlargement—i.e., below the origin of the brachial nerves. Two suppositions can be made to bring such cases of paralysis of the levator palpebræ superioris into harmony with received views: 1st, it may be surmised that the lesion extends to the crus cerebri, reaching there the nucleus of the third cranial nerve; 2ndly, it may be thought that that paralysis is of the same kind as the ptosis we find sometimes in cases of disease of the spinal cord, or in those experiments of mine in which the surface of the brain has been cauterised by the hot iron—two circumstances in which a paralysis of the cervical sympathetic nerve is produced. If either one or the other of these explanations were true, we should always find ptosis existing on the corresponding side. Such is not what we see: ptosis in those cases appears as often on the opposite side as on the side of the lesion. Besides, in the case of the first supposition being true, there would be paralysis of the whole motor communis, which we do not find to have existed; and if the second supposition were true, there would be—what has not been found—symptoms of paralysis of the cervical sympathetic, or at least of its ocular branches. The study of cases of ptosis where the cerebellum or pons Varolii is diseased shows that the mode of origin of that local paralysis is the same then as it is when ptosis appears from a disease of the cerebral hemispheres. In the two groups of cases we find that this paralysis may appear on the same or on the opposite side. On the other hand, we find that disease may exist anywhere in the cerebral hemispheres, or in the cerebellum or pons, without ptosis; so that there is for that local paralysis just what I have shown to exist for other kinds of paralysis—i.e., that it may occur or not, and when it occurs it may be on the side of the lesion or on the other.

I now pass to the mention of some cases of ptosis from disease of the encephalon behind or below the place of origin of the third pair of nerves. For the sake of abbreviation, I will only give the names of the writers who have recorded the cases, beginning with those who have seen ptosis appearing on the side of a lesion in either the pons Varolii or the cerebellum and medulla oblongata: Coindet,[36] Mahot,[37] Marot,[38] Bouvier,[39] Bilot.[40] The following authors give cases of ptosis on the opposite side: Abercrombie,[41] Drs. Gairdner and Haldane,[42] Vaussin,[43] Rouvier,[44] Dr. Fuller.[45] To those cases I might add a number of others, but I believe they are quite sufficient for my purpose. I will, however, mention another, on account of certain interesting features. H. Martin[46] gives a well-recorded case in which three tubercles were found in the encephalon, all on the *left* side: an extremely large one in the cerebellum, one of the size of a filbert in the pons Varolii, and a smaller one in the first frontal convolution; there was ptosis and paralysis, not of the third, but of the sixth cranial nerve on the *left* side. I pass now to another argument.

4. *Lesions in one half of the brain can produce ptosis in both eyes.*—Not only is this proposition grounded on a large number of cases, but the details of those facts leave no doubt that it was not owing to a mere coincidence that ptosis appeared in the two eyes in individuals whose brain had lesions only in one side. The appearance of paralysis of the levator of the upper lid in both sides has been noticed in cases in which the lesions were in very various parts of the brain. The lesion or lesions consisted in a tumour pressing on the right Gasserian ganglion and the right crus cerebelli in a case of Smoler's;[47] in two small cancerous tumours, one in the anterior lobe, the other in the posterior, on the left side, in a case of Dr. J. W. Ogle's,[48] in which the ptosis was greater on that side (the left) than on the other; in a large abscess in the left middle and posterior lobes in a case of De Castelnau's;[49] in an inflammation of the lower surface of the right anterior lobe in a case of Gendrin's;[50] in an abscess in the right sphenoidal lobe in a case of Leroy's;[51] in three abscesses, size of an egg, in the convolutions of the left hemisphere, causing direct hemiplegia, in a case of Gibert's;[52] in softening of the left corpus striatum and optic thalamus in a case of Sevestre and Lauth's.[53] We see by these cases that a lesion in one lobe, either the anterior, the middle, the sphenoidal, or the occipital, or in the basal ganglia, or the crus cerebelli on one side, can produce ptosis in both eyes. I think it is needless to insist upon showing how contrary these facts are to the admitted views on the mode of production of paralysis.

If now we sum up all the facts that I have mentioned as regards ptosis, we find that it can appear either on the side of the lesion, on the opposite side, or on both sides; we find that it can occur on one side while the limbs are paralysed on the other side, or appear on the side of the hemiplegia, whether cross or direct. Besides, I will soon show that ptosis as well as other local or more extensive kinds of paralysis may not appear in cases of lesion in almost any part of the brain not involving the nucleus and roots of the third pair of nerves. There is therefore no possibility of doubting that ptosis, in cases of brain disease sparing that nucleus, does not appear, as is believed, from the loss of function of the part the structure of which is then evidently more or less altered, but as an effect of a paralysing influence exerted on the cells composing that nucleus—influence caused by an irritation starting from the cells or fibres of the diseased place, or of its neighbourhood.

When a cerebral lesion, as I will try to show hereafter, causes ptosis, or any other paralysis, the mechanism of production of the loss of movement is exactly the same as in cases of paralysis arising from the influence exerted on certain parts of the nervous centres by an irritation starting from the nerves of the bowels, or any other nerve in the limbs, trunk, or head. To specify, I repeat that ptosis caused by worms in the bowels, by a neuralgia of a branch of the trigeminal nerve, or some other peripheric irritation, appears, as I will try to show, in a similar way as ptosis from disease of the cerebellum, of the pons Varolii, of the basal ganglia, or of the white or grey substances of the cerebral lobes.

The views put forward lately as regards the centre of action of the will power over the levator palpebræ are proved absolutely false by the facts I have related. I will only say, before concluding, that another series of facts might have been added to those I have made use of. It consists of cases of alteration of the crus cerebri on one side, with paralysis of all the branches of the third pair of nerves on the corresponding side. If it were true, as Meynert and others maintain, on anatomical appearances, that fibres which are mere continuations of those of the motor oculis on each side proceed from the nucleus into the crus cerebri on the other side, we would always find a paralysis not only of one motor communis, but also of fibres of the other in cases of destruction or considerable alterations of one of the crura cerebri. On the contrary, in most of those cases the eye is then affected only on one side. As I will show hereafter, a cross paralysis of the various muscles of the eye—either the levator palpebræ, the iris, or the recti and the small oblique—must receive another explanation than the admitted one, which is rendered impossible by the fact just stated, that in most cases of considerable lesion of one of the crura cerebri we find the third nerve paralysed only on one side.

And now, to conclude, I will say that, contrarily to what

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[36] Mémoire sur l'Hydrocéphalie, p. 98; quoted by Lallemand, loc. cit., vol. iii., p. 52.
[37] Quoted by Gintrac, loc. cit., vol. vii., p. 336.
[38] Bulletins de la Société Anatomique, 1875, p. 189.
[39] Bulletins de l'Académie de Médecine de Paris, vol. xii., 1846, p. 217.
[40] Quoted by Rosenthal, Traité Clinique des Maladies du Système Nerveux, trad. française, p. 215. Paris, 1878.
[41] Loc. cit., p. 236.
[42] Edinburgh Medical Journal, March, 1861, p. 789.
[43] Thèse Inaugurale (Paris, 1846), No. 28, p. 34; reproduced by Gintrac, loc. cit., vol. viii., p. 372.
[44] Quoted by Lallemand, loc. cit., vol. i., p. 134.
[45] A very interesting case of cyst in the *left* half of the cerebellum, with a paralysis of the *left* limbs and *right* ptosis, in THE LANCET, vol. ii., 1861, p. 422.
[46] Bulletins de la Société Anatomique, 1877, p. 252.
[47] Quoted by Ladame, loc. cit., No. 155, p. 171.
[48] Transactions of the Pathological Society, vol. ix., p. 20. London, 1858.
[49] Bibliothèque du Médecin-Practicien, vol. ix., p. 132. Paris, 1849.
[50] Ibid., p. 142.
[51] Bulletins de la Société Anatomique, 1866, p. 252.
[52] Thèse Inaugurale, No. 256, p. 14. Paris, 1859. Reproduced in Gintrac, loc. cit., vol. viii., p. 256.
[53] Bulletins de la Société Anatomique, p. 614. 1875.

is admitted—1st, *ptosis can appear from disease in almost any part of the brain, including even the cerebellum and the pons Varolii*; 2nd, *ptosis can occur in the eye on the side of the lesion, or on the opposite side, in cases of disease sparing the nucleus, trunk, or branches of the third pair of nerves.*

Clinical Lecture ON BLOODLETTING.

Delivered at University College Hospital on Oct. 3rd, 1878,

BY PROFESSOR T. WHARTON JONES.

GENTLEMEN,—We have lately had under treatment cases of iritis and catarrho-rheumatic ophthalmia in which venesection was prescribed with great advantage; and, besides these, numerous other inflammations of the eye in which blood was taken by leeches and by scarification of the palpebral conjunctiva. I, therefore, think that I may on this occasion advantageously occupy your attention with a few remarks on bloodletting.

At the present day medical practitioners seldom order abstraction of blood by venesection in cases of inflammation, and have even misgivings as to the propriety of applying leeches, the current doctrine being that it is not necessary for the cure, and that it involves a risk of impairing the strength needed to bear up against the disease. Formerly quite the contrary opinion prevailed, so that it would have been considered bad practice to abstain from the use of the lancet in any inflammatory complaint whatever. Bloodletting was, therefore, very commonly prescribed, but the extent to which it was sometimes pushed, especially by repetitions of the venesection, it must be admitted, was anything but reasonable, and, no doubt, reform was imperatively called for. Instead of simple reform of indiscriminate practice, however, complete reaction in the opposite direction has taken place, as is so common when extreme views on any subject come to be called in question. And now, as I before observed, doctors abstain from venesection, or even leeching, and that to the most moderate amount, in almost any case of inflammation, however severe.

Under these circumstances, in face of such a difference between past and present opinion, it may fairly be asked—and the question I consider one to which it is of the highest importance to obtain an answer, founded on the dictates of science and experience,—under these circumstances, I say, it may fairly be asked whether by abstention from bloodletting altogether, as is the present fashion, inflammations of important organs are not often allowed to run a prolonged and disastrous course, which might be prevented by a timely abstraction of blood in such quantity that the loss of it could be in no wise injurious to the patient?

This question I will venture to answer as regards an important inflammation of the eye—namely, iritis. And first, I would observe that, in my experience, blood may be safely drawn, in any case in which we would think of letting blood at all, to the amount of ten to twenty ounces, while in many cases a repetition of the venesection to the same quantity need not be feared. You will have opportunities of observing in cases of iritis under my treatment here, that when bleeding has been had recourse to at the early stage of the disease, the pain around or over the orbit, or in the temple, ceases, or is soon greatly mitigated, the feeling of depression of the strength—for it is only a feeling, not real weakness—is relieved, the vascular congestion of the eye subsides, the pupil yields more completely to atropia, while mercury operating with more effect, less of it requires to be given. Convalescence is thus established within two or three weeks, sometimes even one week, with strength not only unimpaired but actually improved. *Apropos* of this, let me relate a case. My friend the late Mr. Graham, formerly Professor of Chemistry in this College, and latterly Master of the Mint, was seized with rheumatic iritis, for which I attended him in conjunction with the late Sir Robert Carswell, then also a professor in this College. Though Mr. Graham was not a strong man, I bled him, and, with the concurrence of Sir Robt. Carswell, repeated the venesection two or three days after; calomel with opium internally, and a belladonna application externally, were at the same time prescribed. Within a fortnight our patient was convalescent and back again to his lectures at the College, with strength not only unimpaired but actually improved. Though once before this he suffered from an iritis, for which he was successfully treated by the late Dr. Mackenzie, of Glasgow, he never had another attack. But mark you this to show how much Mr. Graham appreciated the benefit he had derived from the bloodletting: some years afterwards, finding himself rather out of health generally, he called on me one day and asked my opinion as to whether a bloodletting on this occasion was as likely to to do him as much good as before. I was happy, however, to assure him that there was not now any necessity for the abstraction of blood; and to set his mind completely at rest I took him to the late Sir James Clark, who concurred in my opinion.

Without bloodletting, convalescence will not, in similar cases, take place in double the time, or even longer, and that only imperfectly; for, as a result of such a prolongation of the inflammatory action, serious organic damage of the eye is liable to accrue in the shape of synechia posterior, and implication perhaps of the ciliary body, choroid, and retina; whilst by the prolonged treatment the strength of the patient is pulled down, and a great tendency to relapse from slight causes remains.

In such a damaged condition of the eye, iridectomy often does good as a "no better do," but odd it is that the surgeon who would not hesitate to put the patient under the influence of chloroform or ether, and forthwith perform this operation, would, perhaps, shrink from ordering the more simple one of venesection—nay, even from the application of a few leeches—at the beginning of the iritis, by the beneficial operation of which the damaged state of the eye, requiring iridectomy, might have been prevented.

I have thus instanced the advantage of bloodletting in iritis, because we can so well observe its effects from day to day, and because I can speak from experience on the subject, elucidated by scientific observation as to the pathology of the inflammatory process generally. The *process*, mark me; for the state you have to contend with at the beginning of a pure, uncomplicated, acute inflammation, is very different from that which has supervened in the order of things at a later stage. First in the series of changes which take place in the inflammatory process, of which a part of the body accessible to observation is the seat, there is the visible rubor or redness, and the invisible nervous and muscular action which led to the vascular congestion on which the redness depends; while in the later stages there are the visible manifestations of the exudation of lymph, the tumor or swelling, &c., which have supervened on the congestion by the invisible work of liquid diffusion and cell-multiplication. Abstraction of blood in the beginning of an inflammation relieves the congestion, and thereby prevents or limits exudation. By abstraction of blood in the later stage, after exudation has taken place, congestion will even then be relieved, though less quickly, and in proportion as re-establishment of the circulation in the inflamed part takes place, the exuded matters tend to be absorbed, and so the inflammatory process slowly comes to an end.

The doctrine that the inflammatory process consists merely in "proliferation" virtually ignores the vascular congestion and the symptoms depending on it, such as *rubor cum calore et dolore*. The doctrine thus refutes itself, by omitting cognisance of the condition on which depends the supply of material from the blood for the maintenance of the increased activity of cell-multiplication constituting "proliferation." By disallowing vascular congestion as an all-important stage in the inflammatory process, the doctrine of proliferation supplies a plausible argument against the necessity of bloodletting, easily admitting, however, of being disproved by clinical observation and experience.

A peculiar incompressibility of the artery in feeling the pulse, hot skin, and white tongue are indications of the propriety of bleeding in general. They are so in iritis, in particular, and, I may add, catarrho-rheumatic ophthalmia also, in which the orbital or temporal pain and apparent depression of the strength are often much greater than in

iritis, whilst danger to the integrity of the eye is as great, though in a different way—viz., by rapid ulceration to penetration of the cornea with all its disastrous consequences, such as prolapsus iridis, &c.

Irrespective of the general indications I have mentioned, the local subjective and objective symptoms in each case of iritis or catarrho-rheumatic ophthalmia will, often of themselves, furnish sufficient indications for the abstraction of blood. Circumorbital or temporal pain, for example, is a good indication, for when an acute ophthalmia in an ordinarily strong person is attended by that subjective symptom, venesection, followed by calomel and opium, quickly gives relief. And the same may be said of the ear-ache in acute inflammation of the membrana tympani. The absence of such pain, however, would be no counter-indication in the face of well-marked objective symptoms.

In severe inflammations of important organs the system tolerates the loss of blood in greater quantity than when there is no inflammation present, or when the organ inflamed is of less vital importance in the economy. In illustration of this fact the late Dr. Marshall Hall, in his work "On the Morbid and Curative Effects of Loss of Blood," pointed out from his experience that if several patients affected with dissimilar complaints be bled, while sitting in the erect posture, it is found that one patient, perhaps, will faint on losing only a few ounces of blood, while another will stand the loss of ten times the quantity before syncope takes place.

The complaints in which the greatest quantity of blood may thus be drawn without the speedy induction of syncope are: inflammatory congestion of the brain, inflammation of serous membranes, such as pleuritis or peritonitis, and inflammation of the parenchymatous substance of organs, such as pneumonia, to which may be added, as before mentioned, iritis and catarrho-rheumatic ophthalmia. Now take notice that these are the very complaints in which abstraction of blood is of most benefit, and, therefore, most called for. Dr. Marshall Hall accordingly laid it down as an axiom that in the operation of venesection the quantity of blood lost before fainting comes on, whilst the patient is in the erect posture, is *never more than is requisite for the cure of the inflammation, and never so great as to prove hurtful to the patient.*

In regard to the propriety of repeating venesection, the late Mr. Wardrop remarked that of a number of persons bled for inflammatory diseases, those who have lost the *largest quantities of blood by the fewest repetitions* of the operation have made the most rapid recoveries.

One moderate bleeding at first—say, to sixteen ounces—is usually sufficient for the speedy cure of an iritis or catarrho-rheumatic ophthalmia; but in some cases it may be necessary to repeat the venesection. The continuance of great pain in and around the eye, much vascular congestion, and the formation of a buffy coat on the blood previously let, will generally, taken in conjunction with other circumstances, indicate the propriety of a repetition of the venesection. If the first bleeding was well borne, a second may safely enough be had recourse to; but it is to be remembered that fainting comes on from the loss of smaller and smaller quantities of blood in the subsequent operations; showing that repetitions of the venesection are less and less necessary.

When it is not considered proper to repeat venesection, the application of leeches to the affected organ may still be necessary and prove advantageous. Leeches alone, applied near the corners of the eye, without any preceding venesection, you will often find sufficient for the speedy cure of moderate degrees of iritis and catarrho-rheumatic ophthalmia. It being always, of course, understood that the appropriate medicinal treatment is employed.

In acute inflammation of the membrana tympani attended by ear-ache in children, a leech or two behind the ear and a few doses of gray powder give speedy relief, and, by arresting the inflammation, prevent damage to the structure and function of the ear. In grown-up persons, if the pain in the ear be very great, venesection may be required, followed up with blue-pill or calomel, colchicum, and Dover's powder.

The inflammatory complaints not admitting of substantial benefit from the abstraction of blood, or in which abstraction of blood is not called for, such as bronchitis, conjunctivitis, and other inflammations of mucous membranes, are those in which, if venesection be performed, the patient is liable to faint before much blood has flowed, it being understood that the patient was sitting in the erect posture during the operation. A patient, it is to be particularly remembered, ought never to be let blood while in the recumbent position, as syncope less readily takes place, so that more blood might be drawn than is required or safe. Of course, if any tendency to syncope manifests itself when the patient sits up, that alone would be a counter-indication to the abstraction of any blood at all. When syncope does occur while the patient is sitting erect, he should be placed in the horizontal position, with his head low, and his feet raised, in order to favour the gravitation of blood to the brain.

Syncope, I may observe, is owing to diminished access of arterial blood to the brain, in consequence of the sudden constriction of the small arteries which takes place. The paleness and coldness of the surface of the body, and collapse of the face, indicate a similar impediment to the circulation in the skin. Relaxation of the muscular walls of the arteries, and dilatation of their calibre (which soon succeed to the contracted and constricted state of those vessels), taking place, free access of blood to the brain and surface of the body is restored, with corresponding relief of the depression of the vital powers, which had been occasioned by the impeded circulation in the extreme vessels on the one hand, and the overloading of the heart and lungs by the consequent reflux of blood to those organs on the other.

Bloodletting by arteriotomy, or puncture of an artery, has been practised, but it often happens that the requisite quantity of blood cannot be drawn. The artery being opened with the lancet, contraction of its muscular walls is excited by the irritation of the incision, so that the calibre of the vessel becomes constricted, and the blood at first merely trickles out, instead of issuing in a stream or jet. After a time, however, the walls of the artery relax, and its calibre then becoming dilated, the blood jerks out. Suppose a sufficient quantity of blood has been obtained, now comes the difficulty and trouble—namely, the arrestment of the bleeding. To effect this, it is necessary to apply pressure over the vessel on either side of the puncture, by means of graduated compresses and a tight bandage, so as to intercept the stream of blood in it, whether direct or retrograde. The artery which admits best of this pressure is the temporal artery, the subjacent bone offering the means of counter resistance. Notwithstanding the pressure which may thus be advantageously applied, however, hæmorrhage sometimes bursts out from the punctured artery owing to the now relaxed state of its walls permitting, to the fullest extent, the impulse of the heart's action on the stream of blood. Under such circumstances, the practice is to divide the artery completely across, in order that the ends may retract within the sheath, and become closed, first by an external clot, to be followed by the formation of an internal clot, and the eventual obliteration of the artery at the place. Neglect of this precaution has sometimes permitted the formation of an aneurism.

Besides the disadvantages of arteriotomy which I have pointed out, opening an artery is not so simple an operation as venesection. To get at the temporal artery in order to puncture it conveniently, it is necessary first to cut through not only the skin and subjacent cellular tissue, but also a thin fascia over the vessel. We thus see that *arteriotomy*, even if it had any advantage over *phlebotomy*, which it has not, is too troublesome an operation to merit being much recommended for the abstraction of blood. What led to the employment of arteriotomy in preference to phlebotomy appears to have been the loose unmeaning hypothesis that inflammation is owing to an "increased action of the heart and arteries," and that, therefore, abstraction of blood from an artery would be going more directly to the root of the disease than abstraction of blood from a vein.

The excessive bleedings formerly in vogue appear to have been prescribed under the erroneous idea that it was by the mere diminution of the quantity of blood in the body that the cure of an inflammation was to be effected; and that, therefore, if the inflammation did not yield to one venesection, it ought to yield to a second, a third, or even a fourth—a "Sangrado" practice by which the patient was actually drained of his life's blood, instead of being cured of his inflammatory attack. But that this idea was not well-founded is shown by the fact that it is not in the full-blooded that the severest inflammations always occur. The truth is that the mode in which the abstraction of blood operates beneficially in subduing inflammation consists, when practised in the early stage of the attack, as I before hinted, in the impression

made on the vaso-motor system of nerves and in the changes produced in the composition of the blood whereby re-establishment of the activity of the circulation in the congested part is promoted. The arteries, from being at first constricted, become dilated, and the blood is rendered thinner by the increased absorption into it of serous fluid from the interstices of the tissues which, in the dilated condition of the arteries, more freely takes place.

In many low states of the system very stubborn inflammations occur, and though, in most such cases, it would be improper to take away blood by venesection, leeches are, nevertheless, often of the greatest service. Though it is evident also that the powers of the system require to be raised by nutritious diet and strengthening medicines, it is bad practice to have recourse at once to the indiscriminate and premature employment of this treatment. The nutritious diet, even if swallowed, fails to nourish, and the tonic medicines make matters worse. In a case of scrofulous ophthalmia, for example, it is a common thing to see port wine, quinine and iron, and the like forthwith prescribed, instead of first trying to check the inflammation in the only way in which that can be most easily and safely done—viz., by the application of a leech or two to relieve the congested vessels, and the exhibition of a few doses of grey powder to correct the morbid state of liver and stomach. When by such medication the inflammation with the intolerance of light is abating, then, but not sooner, tonics may be advantageously given, with liberty to the patient to eat as much as he has appetite for. Counter-irritation, if had recourse to at all, ought never to be ordered until this convalescent stage of the disease has set in. Blistering at first only tortures the patient, and does no good, if it does not aggravate the inflammatory symptoms.

Scarification of the palpebral conjunctiva we frequently practise in cases of purulent ophthalmia and chronic conjunctivitis. The vessels of the part being in such cases much engorged, a few superficial scratches with the lancet are sufficient to give issue to a very considerable quantity of blood, and the propriety of the operation may be estimated by the freedom with which the blood is evacuated. After the bleeding has ceased we apply to the scarified surface the nitrate of silver in substance or solution, the red precipitate ointment or the like according to circumstances. It is, however, to be remembered that it is not the mere quantity of blood abstracted by scarification that does good. By first emptying the engorged bloodvessels, the subsidence of the inflammatory congestion admits of being more effectually promoted by the action of the irritating applications which I have said we make to the conjunctiva for that purpose immediately after the scarification. Without previous scarification the irritating applications make little beneficial impression. Often they do ill. As to the *modus operandi* of irritating applications in curing conjunctivitis, you will find it explained in my Ophthalmic Medicine and Surgery.

LITHOLAPAXY.

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THE object of this operation is to remove at once, by the urethra, the débris created by the lithotrite. It is based on the belief of a tolerance by the bladder of protracted manipulation, which has not been hitherto recognised. It is also based on a theory that a brief manipulation, in the bladder, of polished and blunted instruments is less irritating to that organ than is the protracted presence of fragments, especially in view of the fact that the bladder hugs the latter more or less sharply at each micturition. When lithotrity is properly done, the process of crushing is easy and safe. The real question relates to the subsequent disposal of the fragments. If the purpose of the surgeon is to get rid of them, and if their evacuation has hitherto been, for the want of instruments, slow and injurious to the bladder, it is fair to consider whether this object cannot be better attained with the aid of an instrument devised to evacuate the bladder more quickly, through the urethra, while its walls are held apart at their full normal dimensions, such, for example, as this canal attains when the meatus is compressed during the passage of urine.

It is quite safe to leave this question to be settled by such further experiments as shall be deemed wholly satisfactory. In the meantime, in order that the operation of evacuation may be accomplished in the readiest and safest way, it may be well to offer a few explanatory suggestions in respect to it.

One difficulty at the outset may be illustrated by a simple experiment. If a small catheter, surmounted by a funnel, be tied in an ox's bladder and held vertically, water introduced by the funnel will distend the bladder very forcibly. Similarly, the hydrostatic pressure of a column of water but a few inches higher than the pubes will distend the human bladder beyond its safe capacity. So that it may be assumed that any catheter surmounted by a bulb is more liable to injure the bladder by over-distending it than when the bulb is lowered to the level of the bladder or below it. The weight of a full bulb in the former position also prevents accurate manipulation of the catheter. It is more easily handled in a stand.

The instrument now employed is a syphon, at one of whose extremities is a large metal tube that takes advantage of the full normal capacity of the urethra, while the other terminates in an elastic bulb and glass receptacle. The tube extremity is shaped to facilitate its introduction, and also so that its orifice may be placed, if necessary, at the lowest point in the bladder, at the apex of an inverted funnel, among the fragments, without being occluded by the usual valve-like action of the bladder-wall. A straight tube has advantages over a curved one; the surgeon can more readily direct it and regulate its pressure; it is less liable to obstruction, and better cleared by a rod. Again, a straight instrument, when of the size 29, 30, or 31 of Charrière, is more easy to introduce than a curved one. In order to carry it into the bladder with least resistance, it should be passed as far as possible in a nearly vertical direction towards the anus, before the handle is depressed; its extremity then lies not only in front of the aperture in the triangular ligament, but, what is of more importance, below it; and is afterwards tilted up to this orifice by depressing the handle of the instrument to the axis of the body. The tube should be next rotated through this aperture like a corkscrew; and during this process, its point, which is made a little excentric for this purpose, revolves in a small circle until it discovers the orifice. A common difficulty in introducing a catheter or lithotrite results from depressing the handle prematurely, by which the beak is arrested above the aperture in the ligament, instead of below it. This error should be carefully avoided in introducing the large straight tube, and which so fills the urethra that it needs every advantage in traversing its less yielding parts. Indeed it is not superfluous to say that even a free use of oil injected with a syringe both into the urethra and into the tube may sometimes determine the question of the passage of the larger sizes. And yet, with these precautions, the whole manœuvre is a very easy one. Before introducing the tube the calibre of the urethra is ascertained by a common olive-pointed elastic bougie, or a sound. I have not found much advantage in trying to dilate it, unless at the moment of the operation, by incising the meatus, which is the narrowest part, or "divulsing" a stricture when it exists. Such preliminary enlargement of the contracted canal, unless especially contra-indicated, suggests itself.

But there is another important measure that does not suggest itself, and yet deserves careful attention. In order to protect the bladder from over-distension the first movement of the aspirator should be to withdraw water from it, and not to inject water into it. This cannot be too strongly emphasised. As preliminary to this precaution the surgeon ascertains exactly the capacity of the bladder. For this purpose it should be emptied by a catheter, and tepid water slowly injected, until the fluid is forcibly expelled between the catheter and the loosely grasped urethral walls. This reaction of the organ, which anæsthesia does not prevent, may be relied on to furnish a sufficiently accurate indication of the size of its cavity. If the fluid be now drawn off and measured, the same amount may be safely reinjected through the large tube, which is next to be introduced, the injected fluid being retained in the bladder by a tape tied round the penis, with the thumb, or a cork, at the extremity of the tube. Here is, I think, a critical moment of the operation, because if the contents of the bulb are added to those

of the already distended bladder the organ may be overstretched. It should not be forgotten, therefore, that the elastic bulb, before it is attached to the tube, should be compressed until the sides meet, *in order that its first action may be to withdraw from the bladder, by its expansion, such an amount of fluid as can be reinjected with safety.* The present instrument holds ten ounces. By compression it loses five ounces. This amount would then be aspirated from the bladder by its first expansion, after which the usual pumping action displaces only about two ounces of fluid at each stroke, and can hardly injure the bladder. In order to direct attention to the importance of compressing the elastic bulb, a clamp is provided with the instrument to compress the bulb before it is attached to the tube. Other details, relating especially to the signs and avoidance of obstruction, may be found elsewhere. Briefly, when fragments are still felt, and yet cease to fall into the trap, there is either obstruction, which usually occurs in the tube, and should be removed by compressing the bulb or introducing the rod, or the fragments are too large to pass the tube, and need further crushing. In respect to the time occupied by the whole operation, I would suggest that if the surgeon will crush the stone as usual, and then remove the fragments, he will probably find his patient to be still in so good a condition that he will be tempted again to introduce the lithotrite, and again the tube. At the end of half an hour or more he will have repeated this several times, and will then find that the stone, if of average dimensions, has been evacuated. He will also find, in a common case, that the patient is no worse for the operation.

As these remarks apply chiefly to the mechanical part of lithotrity, an operation which, indeed, depends more than any other for its success upon a careful and economical adaptation of its instruments to their employment, a few observations may be here added respecting the lithotrite.[1]

It is very desirable, during a long operation, to prevent the impaction of the lithotrite, which interferes with crushing and sometimes injures the neck of the bladder. This may be effected by raising the floor of the female blade, and by adding lateral notches to the male blade, which should be also provided with a central septum at the heel. The lateral grooves for the male blade should also extend through the heel of the female blade. I am persuaded that the simplest movement for locking a lithotrite is a quarter rotation of the right wrist, without displacing the fingers of either hand. Further, it seems not to be always remembered by surgeons that the "rapidity" of a lithotrite depends upon the inclination of its screw thread, and that while the slowest screw gives most power and requires the strongest blades, "rapidity" sacrifices power. In the longer and more rapid operation now contemplated, larger and stronger blades than have been commonly employed, and which also better protect the bladder than do the latter, seem to me desirable.

I have elsewhere said that the blades of a lithotrite should be as nearly at right angles with the shaft, and their floor as straight, as is compatible with their convenient introduction into the bladder. Many instruments are made with an oblique blade, which is also so rounded at the heel as to curve their floor. This is a mistake. A cubical stone, for instance, would exactly fit a right-angled lithotrite. But when the same blades are made oblique, at an angle, for example, of forty-five degrees with the shaft, then, in order to grasp the same stone, they must not only be opened wider, but they will touch the stone at points nearer the shaft than before. In other words, the size of their grasp rapidly diminishes with their obliquity. They must be opened wider, and they seize less of the stone. Their power also diminishes, because, if they are made longer with the view of retaining the size of their grasp, their increasing leverage increases friction in the slide. This is readily seen by increasing their obliquity until they reach the line of the stem of the instrument, when they tend merely to roll the fragment between them. The latter then acts only as a wedge to separate them, and the friction of the slide is then greatest. In other words, right-angled blades crush best and wedge least. Oblique blades, on the contrary, wedge more and crush less, while the depth of their grasp is also less. And what is here true of the whole blade is true of any part of it—the heel, for example, which should not be oblique nor much rounded, but as nearly at right angles with the shaft and with as straight a floor as is compatible with its convenient introduction. It may be added that the tip of the female blade should be bevelled, so that (if we compare it to a bent finger) it may impinge against the upper wall of the prostate, while passing it, rather with its pulp than with its nail.

In conclusion, it may be said that a small stone does not usually entail a serious operation of any kind. On the other hand, a large stone does. It may be better to resort to lithotomy in the case of a large stone, with a diseased bladder or kidney, however fatal the former operation may be in such cases. But there has hardly been any material change of late years in the operation of lithotomy, unless it be in a greater attention to cleanliness and in the general treatment of the patient. It is certain that no *bonâ fide* Lister dressing can be applied to the wound. The danger also of hæmorrhage remains the same as heretofore. So that, I think, any very great increase in the percentage of recoveries from lithotomy would, perhaps, result chiefly from a resort to the operation in more favourable cases than formerly, by which I mean in certain cases of stone which have been of late relegated to lithotrity, and which might as well be subjects for experiment with the operation now proposed, as for lithotomy.

The question then reduces itself to the following:—

1. Whether, when any stone, large or small, has been crushed, it is not better to distend the urethra to its natural limits, and remove the detritus at once, by a few strokes of the syphon, than to leave it to be expelled through the contracted urethra by the unaided and comparatively ineffectual efforts of the bladder.

2. Whether, by thus assisting the bladder, we may not so increase the amount evacuated, and so diminish the time of the operation, that it may be possible to treat with success, by the method now proposed, larger stones than heretofore by lithotrity.

[1] The aspirating syphon and the lithotrite have been made by Weiss and Son, with great mechanical perfection.

NOTES ON SAN REMO AND THE RIVIERA.

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THE time having now arrived when the patients of many medical men will be preparing to start for San Remo or some of the other health resorts on the Riviera, the following brief observations may not be uninteresting.

First, I would make a few remarks as to the journey here, which is really far less formidable than persons who merely read of the Riviera would suppose. I started from Cannon-street station on Monday, the 14th inst., by the 7.45 A.M. train, and reached Paris at 6.5 P.M. By the aid of one of the officials, who kindly got my luggage passed quickly, I was just enabled to reach the station of the Paris, Lyons, and Mediterranean railway in time to catch the express train, which left at 7.15, and arrived at Marseilles the following morning at 10.40. Here I was detained till 1.20 P.M., the train then travelling slower than the slowest of English parliamentary trains, stopping at the most insignificant stations, where not a single passenger alighted, and I consequently did not get further than Mentone, and this not until nine o'clock at night. The distance from Marseilles to Mentone is only 155 miles, and from the latter place to San Remo but twenty-two miles. The time occupied in the journey to Mentone was eight hours and a quarter, and from thence to San Remo, in consequence of a long detention at the border town, Ventimiglia, two hours and three-quarters. Now, had it not been for the long and apparently unnecessary detention at Marseilles and Ventimiglia, it would have been the easiest thing possible to have reached San Remo in good time the same night, thus accomplishing the whole journey from London to San Remo in thirty-six hours, and this notwithstanding the slow rate at which the train travelled from Marseilles.

But some will say that the time occupied in the journey is not of so much consequence to invalids, and that it is not desirable for them to travel such a long distance so quickly. This, no doubt, would be quite true in some, but not in the majority of cases, as if one night only be passed on the road,

and this in a *coupé-lit*, it would be difficult for them to perform so long a journey with less trouble and fatigue.

Now, if English people could rely upon reaching this, the most distant of all the health resorts of the Riviera, in the time above mentioned, I feel confident that very many more would only be too glad to avail themselves of the advantages of this and the other towns on the Riviera, where not only is the climate mild, bright, and sunny, but Nature is seen in her loveliest aspects. The most beautiful part of the journey lies between Cannes and San Remo, and as you are carried along, as we have seen, not too quickly, fresh beauties become visible at every turn. On the one side rise the lofty and ever-varying outlines of the Alpes Maritimes, clothed on their lower ranges with a semi-tropical vegetation, and on the other lies the deep blue sea, with its numerous little bays and promontories.

As nothing reveals the character of a climate more clearly than the vegetation flourishing therein, the trees and flowers, I will briefly allude to the chief of those which catch the eye in passing. Among the trees noticed, first and foremost are the olive-trees, with their curiously distorted stems, grey and willow-like leaves, and abundant and now green fruit; then, as you approach the Esterel Mountains, are observed numerous cork-trees—a species of evergreen oak, with the outer bark or cork partly removed; but still more conspicuous objects are the eucalyptus or blue gum-trees, which often obtain great dimensions, towering into the air and giving a special feature to the landscape. Now we pass groves of orange-trees, and, as we reach Nice, with its beautiful garden-like environs, and approach Mentone, we observe that the lemon-tree, owing to the greater mildness of the climate, takes the place of the orange-tree to some extent. Then there are magnificent fig-trees everywhere, and all along the route, especially in the neighbourhood of Ventimiglia, clusters of graceful palm-trees. In many situations gigantic specimens of the aloe occur, and it is no uncommon thing to see it in blossom, the stem bearing the flowers being tall, round, and massive, like the mast of a boat, and to sustain which the plant yields up all its juice and nourishment, the thick and succulent leaves shrinking and withering up. Then, again, there is the pepper-tree, distinguished by the elegance of its foliage and the beauty of its bunches of coral-like berries; while, lastly, now and again are to be seen fine specimens of that curious cactus, the prickly pear, laden with its reddish-yellow, oblong prickly fruit. Not to extend the list of rare and beautiful trees which flourish in this district, as one might readily do, I will pass on and briefly allude to a few of the flowers to be seen on all sides in such abundance, and many of which in England will only grow in greenhouses. Roses of all descriptions and in great perfection still abound; indeed, they may be gathered throughout the winter. Various kinds of geraniums, the delicate lavender-coloured plumbago, and lastly the beautiful oleander, which in England is rarely met with, and in Germany grows only in tubs and carefully protected in the house in winter, here flourishes in the greatest beauty and luxuriance.

But I must not forget the countless butterflies, at this time of the year almost extinct in England, which are everywhere seen; so numerous are these that as the train passes they are carried along by the rush of air created, and are almost unable to control their flight, so that when they are more than usually numerous they have the appearance of pieces of variously-coloured paper thrown from time to time from the windows of the carriages.

I have now visited the Riviera, including San Remo, on three different occasions; one winter I stayed and practised at Cannes, where I seemed to miss the winter altogether, the weather being so beautiful as to be more like that of a fine temperate summer; I have, however, on each occasion, noticed that the air of San Remo was cooler and more refreshing than that of any of the towns I have visited on the Riviera, and, indeed, the testimony of all other observers and writers on San Remo is to the same effect. I only wish that the Hospital for Consumption, which I succeeded in establishing at Ventnor, had the advantages of an equally beautiful climate, although it must be said in its behalf that the climate of Ventnor is the best in England for the class of diseases for which the hospital has been specially designed.

San Remo is gradually and steadily growing in public favour. An increasing number of English come every year; fresh hotels are built from time to time; and several English medical men are practising here—Drs. Daubeny, Freeman, Turner, Pickering, and now the writer.

TWO CASES OF

LIGATURE OF THE FEMORAL ARTERY WITH CARBOLISED CATGUT.

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NOW, when the merits of catgut as a ligature are being discussed, it would be well if every practitioner who has ligatured an artery in its continuity would publish the case. Should arteries have been ligatured by men who, like myself, cannot boast much skill or experience, the cases would still be very important as proofs of the success of any particular plan of treatment, or of the efficiency and safety of any particular kind of ligature. Of course, they would not be so valuable if advanced as proofs of the failure of a plan of treatment, or of the inefficiency or danger of a ligature. The hope that the two following cases will be of some slight use is the only excuse I can make for reporting them.

CASE 1.—James B——, thirty-two, soldier, was admitted into the Chorlton Hospital, Withington, Manchester, on October 15th, 1873. He was suffering from an aneurism of the left popliteal artery, about the size of a hen's egg. He had served in India, and had contracted syphilis whilst in the army. He had no history of rheumatic fever, and had no disease of the heart. He was kept in bed, and had large doses of iodide of potassium. After a week of this treatment no beneficial change was observed in the aneurism. I then applied a pair of Skey's tourniquets over the artery in Scarpa's triangle. He was left to manage these himself, and instructed to screw them up alternately. The aneurism, however, continued to enlarge, and the pressure of the tourniquet being removed, the pulsation returned as strongly as when he was admitted. It was then decided to ligature the femoral. I placed a ligature on the artery in Scarpa's triangle on November 11th, 1873. The material used was catgut, obtained from Messrs. Wood, of Manchester, who guaranteed it to be the same as that used by Professor Lister. It was not applied under the spray. The wound was closed with iron-wire sutures, and dressed with carbolic lotion. Complete union by the first intention followed, and the patient was perfectly cured on the tenth day after operation. Two hours after the operation there was no perceptible difference in the temperature of the sound and diseased limbs. He left the hospital in January, 1874; but returned the following August with a rupture of the *right* femoral artery. A large quantity of blood had been effused, and he was in a very feeble condition. So weak was he, that Dr. Law (my colleague), Dr. Mallett, and Mr. Jones of the Children's Hospital, Manchester, who saw the case with me, advised that no operation should be undertaken. The patient, however, insisted that something should be done for him, and, finally, it was decided that amputation offered the best chance of success. I amputated in the middle of the upper third of the thigh; but he survived the operation only a few hours. After his death I had an opportunity of examining the left femoral, which had been tied. It was perfectly continuous, and slightly thickened at the seat of ligature, where it adhered for about a quarter of an inch to the sheath on the outside. The vein did not appear to have been at all disturbed. The artery was completely occluded both above and below the ligature.

CASE 2.—Edwin H——, sixty-one, joiner, was admitted into the same hospital on August 28th, 1872. This patient had an aneurism of the left popliteal, about the size of the closed fist. For three weeks he was treated by iodide of potassium and rest—that is, a fortnight longer than in Case 1. In all other respects, however, the two cases were treated exactly alike, the pressure by the tourniquets being continued over the same space of time in each case. I mention this because it appears to be the opinion of some authors that unless a speedy cure is effected by compression, it should not be continued. The material used in this case was carbolised catgut, without any other antiseptic treatment. The wound healed by the first intention, except where the incision ran through a small slough, produced by the tourniquets.

Remarks.—The ligatures in these cases were tied tight enough to divide the inner and middle coats, and were secured by three knots. Mr. Holmes is, I believe, of

opinion that the mortality from ligature after compression has failed is 10 per cent. greater than when the Hunterian operation is done at once. Does it make any difference where, and with what kind of instrument, the pressure is made? In these cases the pressure was made over that part of the artery which was afterwards ligatured, and was made with an instrument which scarcely at all interfered with the vessels which were to carry on the collateral circulation. I learn from Dr. Van Buren's address to the International Medical Congress at Philadelphia that Dr. Todd, of Dublin, was in the habit of preparing his cases for operation by employing compression, "in order that mortification of the limb might be prevented by allowing some progress to be made in establishing the collateral circulation." The difference in temperature between the sound and diseased limbs, immediately after the operation, in both cases, was remarkably slight, and not the least symptom of gangrene made its appearance in either case, although E. H—— was over sixty years of age. This would lead one to suppose that the collateral circulation was to some extent established before the artery was tied.

Bromley.

ON APOPLEXY OF THE PONS.

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As apoplexy of the pons is a disease not frequently met with, and as the following case presented several points of interest, I forward the notes for publication.

I was sent for one evening by the wife of a patient to see her husband, who was about fifty-five years of age, and who had been brought home about five o'clock that afternoon, supposed to be dead-drunk. He had hitherto been a remarkably steady man, and great surprise was expressed by his wife and friends at his having been brought home in that state. He was put to bed and allowed to sleep until eight o'clock, when his wife tried to awaken him to offer him a cup of tea; but finding that all her efforts were of no avail, she naturally became alarmed, and sent for me.

When I arrived, I found him perfectly insensible; he could not be roused by being shouted at or shaken. His pupils were much contracted, the right one much more so than the left; neither of them was at all influenced by light. The arcus senilis was evident. The breath smelt rather strongly of brandy. His limbs were perfectly paralysed; sensation and motion were quite absent; he had, they said, twitched a little at first, and that made some of his friends fear that he might be suffering from some serious disease. His respiration was slow and stertorous. The right cheek was more flabby than the left. Even the eyelids could not be made to act. The patient gradually became worse; at last the fæces were passed involuntarily; and about four o'clock on the following day he died.

On making a post-mortem examination, I found a small clot occupying the lower part of the right side of the pons, and the parts around were rather congested. There were not any other post-mortem appearances worth noting.

This is an interesting case, inasmuch as there was a certain amount of difficulty in forming a proper diagnosis, for in alcohol and opium-poisoning we meet with general paralysis and perfect insensibility, and in cases of opium-poisoning we have, in addition, the contracted pupil. I judged it was a case of hæmorrhage into the pons, because the coma had come on suddenly, not gradually as it generally does in cases of poisoning by opium and alcohol; slight twitchings were observed at the onset of the attack; the insensibility was complete (though a case has been related where this was not the case); the pupils were contracted, but also irregular; one cheek was more flabby than the other; the habits of the patient had been sober; there was not any depression of spirits, or other mental disturbance generally observed in patients previous to their taking opium. The patient had evidently taken brandy, but a small quantity was known to have been given him by his friends. I concluded that it was not owing to uræmia, as there was not any history of previous disease. The attack had come on suddenly; there were not any convulsions, except the slight twitchings noticed at first. The pupils were contracted, and the symptoms generally pointed to apoplexy of the pons. The clot was found, as I mentioned before, in the lower part of the right side of the pons, and it is interesting to observe that the right cheek was more flabby than the left; probably if the clot had not been quite so large we should have had unilateral symptoms, perhaps paralysis of the left side, as the clot was in a position to press upon the fibres from the left side, which had decussated in the medulla, and the fibres of the right facial, which, together with the fifth, cross in the pons.

Sheffield.

SUCCESSFUL ANTISEPTIC OPERATION FOR STRANGULATED UMBILICAL HERNIA.

By ERNEST SHEAF, F.R.C.S.E. &c.,
SURGEON TO THE NORTH LONSDALE HOSPITAL, BARROW-IN-FURNESS.

As, in the opinion of some eminent surgeons, successful operation for strangulated umbilical hernia is rare, it may be worth while putting on record a case I had, in which the peritoneal cavity was freely opened under carbolic acid spray.

On Feb. 14th, 1876, at 5 A.M., I was called to Mrs. T——, aged forty-nine, stout, healthy, with a large flaccid abdomen, suffering from dragging pains in the bowels, constipation, and vomiting, which last symptom, however, was not urgent. Upon examination I found a large old-standing umbilical hernia, which presented the appearance of a rounded tumour about seven inches in diameter, and protruded about two inches and a quarter. A gentle attempt at reducing it by taxis, under chloroform, was unsuccessful. Enemata and ice-bags were ordered. Later in the day, the symptoms being less urgent and some relief having been afforded, nepenthe and bromide of potassium were prescribed. There was no vomiting now, and it was hoped that it was not a case, strictly speaking, of strangulation, but irritation and temporary obstruction occurring in an old hernia.

On the following day, at 1 A.M., I was sent for in haste. The vomiting had recommenced. A medical friend who was called in advised partial inversion of the patient's trunk, which was at once carried out by inverting a chair on the bed, placing the patient head down along its back, and the calves of her legs resting on the under side of the chair-bottom. She endured this position till 5 A.M. without benefit, and at 10 o'clock, with the assistance of three medical friends, I proceeded to operate under the spray. First making a large Y-shaped incision through the skin over the hernia, layers of fat and fascia were dissected off until I defined what appeared to be the sac, though this I found not to be a very easy matter. I then sought the ring, and having found it, was no further on towards reducing the hernia, as it seemed adherent in other parts, so that if the ring were incised, it would still be held *in situ*. This being my first case and my large flaps and ample dissection having a rather sanguinary appearance, I began to feel a little anxious. The next step was that of opening the sac on a director, continuing the incision freely on my finger. The bowel was in excellent condition, and I incised the ring directly upwards in the middle line, the parietes here being thin and tendinous and giving way crisply before the knife. Before the reduction could be accomplished, I dissected away the hernia from old adhesions, and, not having a catgut ligature by me, dipped a piece of silk in the carbolic solution, and tying a piece of doubtful omentum, cut off the unhealthy part. The bowel now slipped back easily, and the superficial wound was brought together with silver-wire sutures, the end of the silk ligature being drawn aside and fixed to the skin of the abdomen, so as to keep the stump of the amputated omentum pretty close to the internal orifice of the wound. There was very little hæmorrhage. The dressing consisted of a pad of lint soaked in carbolic oil, and on the top of it eight ply of prepared gauze, the whole secured and kept in place by charpie and a many-tailed bandage.

In the after-treatment there is little to record. There was never any rise in the pulse or temperature. The bowels were kept quiet for a few days by opium, after which a healthy stool was naturally passed. Owing to the shifting

of the dressing the wound became septic on the fifth day, but the deeper parts were all healed. The gauze was discontinued, and the lint and charpie and many-tailed bandage retained. In the third week the silk ligature was drawn out, having partly ulcerated its way; the knot was cut to facilitate its withdrawal, and a weak zinc lotion on lint applied. The patient was now able to sit up, and ate her meals more heartily than I thought safe. By the end of March she was "out and about" as usual. I saw her alive and well more than a year afterwards, and I believe she is so still.

Dr. Arnison, of Newcastle-on-Tyne, has recorded two successful cases of operation for strangulated umbilical hernia in THE LANCET for 1870 and 1872.

Barrow-in-Furness.

CHRONIC CERVICAL METRITIS TREATED BY INTERSTITIAL INJECTION COUPLED WITH DILATATION.[1]

BY J. M. BENNETT, M.D.,

SURGEON TO THE LIVERPOOL SURGICAL HOME, AND CONSULTING SURGEON TO THE LIVERPOOL DISPENSARIES.

AMONGST the number of diseases which come under the care of the gynæcologist, there is not one apparently so slight and yet so difficult to restore to its pristine condition as the chronically enlarged os uteri. Whether we accept the old pathology, and regard the first stage as simple engorgement of the parenchyma (congestion), and the second, as lymph effusion, the morbid action in which, unlike that in other parts, ceasing to approach suppuration, but remaining either stationary in size or diminished with increased induration, or, on the other hand, we receive the opinions of Scanzoni, Klob, and others, who believe that no inflammatory action is necessary, but simply congestion and a proliferation of the connective tissue as the correct definition, the facts yet remain that engorgement, sensitiveness, increased weight, and induration, as the result of abnormal action, present themselves as a disease so frequently as to cause authorities like Sir J. Y. Simpson, Marion Sims, Henry Bennet, Atthill, Aran, Churchill, West, Scanzoni, Grailly Hewitt, Barnes, and many others, to lay particular stress upon the diagnosis and treatment. From the number I shall give the remarks of a few. Simpson says that "inflammatory enlargement and induration of the tissues of the os and cervix are frequent in practice, and exist in most cases of very chronic leucorrhœa." Marion Sims found it "the most frequent of diseased states, and considered that it always existed in conjunction with artificial occlusion of the os." T. Gaillard Thomas considers it "the most important subject in his work." And Dr. Atthill says, "These cases have long been the opprobrium of the obstetric physician, whilst their extreme frequency gives to them an importance which the direct effect they exercise on the duration of life does not warrant."

I think I need hardly quote further authority to point out their importance, and can recommend none who so well distinguish the main features by which the benign and malignant varieties are to be recognised as Drs. H. Bennet and Grailly Hewitt.

As to the causes of this diseased state, I will only mention parturition; injuries; excessive sexual indulgence; pessaries; displacements; cervical endometritis; and long-standing dysmenorrhœa, which, according to Scanzoni, rarely fails to induce some change of tissue in the uterus, the most common being hyperplastic enlargement. Dr. Rigby did not seem far astray when he said that "the uterus, being placed at the lower part of the trunk, had to support the chief weight and pressure of the intestines, and, being subject to such great periodic alterations of vascularity, not to mention the wonderful changes undergone during pregnancy and parturition, is particularly liable to be the seat of congestion."

Of the complications of the malady I shall merely mention displacements, cystitis, and cellulitis; and, by interfering with the functions of the uterus, menorrhagia, dysmenorrhœa, and sterility as its frequent accompaniments.

From Dr. Rigby, who mainly depended upon general treatment, to our latest authorities, many and varied have been the means adopted for its cure. Simpson, after describing the use of Vienna paste, nitric acid, &c., concludes with the recommendation of the abandonment of all, in favour, perhaps, of the most destructive, potassa fusa, which he directs to be applied in the form of a stick, and well rubbed in, until a piece three-quarters of an inch, or even an inch, was melted down. Well might he say the decomposition produced a hissing sound. The editor of Dr. Simpson's work upon "Diseases of Women" says that "the caustic was used far less frequently than might be inferred." Gendrin depended upon Vienna paste, whilst Jobert used the actual cautery until, he says, "it melted away." Many of their followers adopted the same line of practice, but in a more moderate form. Marion Sims treats by dilatation, and thinks highly of the power of the sponge tent to modify the uterine surfaces with which it comes in contact. He says "it dilates the neck of the womb; it softens it by pressure and, by a sort of serous depletion, reduces the size, not only of the neck, but of the body of a moderately hypertrophied uterus, whilst the addition of glycerine sets up a sort of capillary osmosis." The same authority, speaking of the abuse of potassa fusa, potassa cum calce, and even nitrate of silver, says, "sometimes the os tincæ becomes wholly occluded by the prolonged use of these agents; more frequently it is partially closed, and the cervix always contracted." Dr. Greenhalgh treats with iodised cotton and glycerine.

Having tried most of the constitutional and local formularies recommended by our most celebrated authorities, I was induced to try the interstitial injection of iodine, from the fact that I had, in the first place, obtained more benefit from its local application in the form recommended by Dr. Greenhalgh than from any other treatment; and, secondly, from the consideration that, if such benefit could be gained by its application to the indurated covering of the os uteri, much speedier absorption and more lasting results might be attained by the absorbent agent being brought into direct contact with the new hypertrophic matter distributed in the midst of the uterine tissue, in a position where absorption might be favourably sought. Acting upon these bases, I first prepare my patient both generally and locally; the latter by relieving any super-engorgement by means of local depletion, carried out by means of cupping, the frequent use of warm water, and the application of glycerine, so as to induce osmotic action, care being taken to avoid the period of menstrual excitement. I then use a simple modification of the hypodermic syringe, which is sufficiently long to be used with Ferguson's speculum; its points are made of eighteen-carat gold; and the other portion, which might come in contact with the iodine, bromine, or other agent inimical to any metal less resistant than gold or platinum, is mercurially gilt. The instrument should be charged with a solution composed of ten grains each of the iodide and bromide of potassium, to which half a drachm of tincture of iodine and sufficient distilled water should be added to bring it up to two drachms. I then either puncture through the speculum, leaving the uterus free if the os and cervix be very large and low down, or fix it with Sims's tenaculum, using a duckbill speculum. I generally make from three to five punctures, according to the amount of hyperplastic matter to be absorbed. A cotton pledget well soaked in glycerine is placed against the part, and rest enforced for at least twelve hours. I seldom find more than three operations are required; and I have never found any disturbance of moment set up, either generally or locally, by the procedure; on the contrary, I have had a number of cases turn out successfully when other methods had proved unavailing.

I have now a patient under observation, thirty-eight years of age, who had been the mother of three children before she was thirty, who had suffered from subinvolution, followed by chronic cervical metritis, and remained barren until after December last, when I treated her by the foregoing method. She is now in the fifth month of pregnancy, and enjoying good health.

In most cases I conjoin the treatment with dilatation by means of the sponge tent, which I put in practice after the first effect of the interstitial injection has passed off. By means of these combined methods of procedure my most sanguine expectations have been fulfilled; the hypertrophied os materially lessened, and resolved to its healthy condition, and that with an absence of those after-consequences, such

1. The substance of a paper read before the Lancashire and Cheshire Branch of the British Medical Association, 1878.

as loss of tissue, painful cicatrices and stricture, which must have presented themselves to the practitioner who has steadily adhered to the mode of treatment by caustics, cauteries, &c.

I may add that I have ventured to try this mode of treatment in some cases of chronic subinvolution, with this difference that I first began with the interstitial injection of a solution of ergotin, and followed it after an interval with the iodine. My success has been such as to warrant a more prolonged trial.

The only drug administered has been the bromide of potassium in large doses, with the object, first, of quieting the excitement of patients, and, secondly, of obtaining some of the benefits described by Professor Binz, of Bonn, who speaks of the potash salts as being positively specific in subinvolution; and, strange as it may appear, I have many times seen advantages derived from a continuous use of this salt quite equal to those described by Dr. R. Williams, who attributed such wonderful powers to its action in splenic hypertrophy.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GREAT NORTHERN HOSPITAL.

GENU VALGUM; FORCIBLE STRAIGHTENING.

(Under the care of Mr. GAY.)

FOR the following notes we are indebted to Mr. T. H. Gillam, house-surgeon.

A girl, S. S——, aged fourteen, was admitted on the 25th of February, for genu valgum of the right and genu varum of the left leg. As Monsieur Adolphe Guérin happened to be at that time in town, advocating the practice of forcibly straightening the limb in these cases—a mode of treatment said to have been successfully carried out by himself and others,—Mr. Gay, with the sanction of the girl's parents, submitted this case to that gentleman for treatment. In the presence of several surgeons, including Professor Lister, the patient was placed under the influence of chloroform; and Mons. Guérin, taking the limb that was in-kneed, and fixing his knee against the inner side of the joint, forcibly, and with repeated jerks, bent it until it was straightened. In so doing, some of the structures appertaining to the joint were heard to give way, the noise being rather that of ligaments or soft textures torn or ruptured than of bones broken. The operator said that the restoration of the limb to its shape was, in his opinion, due to the separation of the epiphysis of the femur from the diaphysis—an opinion, however, which apparently was not entertained by others present. The leg, which after the operation admitted of considerable laxity, especially of lateral movement at the joint, was placed in splints, and these were firmly adjusted by starched bandages, so as to keep it in its normal position. The girl was then placed in bed.

She suffered some pain in the joint for a few days, with some general swelling of the limb, requiring that the bandages should be eased. In a short time these symptoms subsided, when the bandages were tightened and the limb kept at rest for a period of ten weeks. The splints were then removed, and the joint was found to be fairly straight. A starched bandage having been applied to the limb, the girl was allowed to move upon it with care, and with the help of a crutch. After two or three weeks had elapsed, the starched bandage was removed, and a simple calico one substituted. She was then discharged from hospital.

She returned on October 2nd, when the limb was found to have become again in-kneed, but not to such an extent as before the operation. The joint was looser—that is, it admitted of some free movement of the articular surfaces on each other, as well as a slight lateral hinge-like movement; nevertheless the girl did not complain of any weakness in the joint, but the result, as far as the shape of the knee was concerned, was not, in Mr. Gay's opinion, quite satisfactory. The patient has gone to the seaside for the recovery of her health, and on her return, encouraged by the results hitherto of Ogden's operation—a very favourable case being at present under Mr. Adams's care in the hospital—Mr. Gay will, it is probable, submit her joints to that method of treatment.

AMPUTATION AT HIP-JOINT; RESULT.

The boy with secondary amputation at hip-joint, for hip-joint disease, whose case was recorded in the "Mirror" for June 1st, 1878, made his appearance at the hospital on the same day, walking on crutches. He left the hospital on August 20th, and was then extremely emaciated, although improving. His liver could be felt to extend as far as the umbilicus, the suspected result of amyloid degeneration, and his urine contained a considerable quantity of albumen. During the interim the lad has made flesh and gained strength. His liver has become reduced to its normal dimensions, his urine ceases to contain albumen, and the sinuses, which were discharging freely at the last report, have almost ceased to run. Recovery was almost complete.

The case is instructive, inasmuch as it encourages the adoption of unusually severe measures under conditions that seemed in the highest degree forbidding. The boy was reduced to a state apparently incompatible with recovery under any circumstances. The disease, although the utmost efforts had been made to remove it, remained in some of the pelvic bones, and showed no clear indication of coming to a spontaneous end; whilst the liver and kidneys gave signs of grave, if not fatal, change in their tissues. The amputation did not, indeed it was not designed to, remove any material amount, if any, of the primary disease which remained after the joint excision. That in most part remained behind in bones and other structures that were originally or became consecutively affected, and from which it might have been surmised no process short of their complete extirpation could be of any avail. It seemed, however, that it was not the original disease, but certain conditions under which it continued to exist, that gave to it its character of permanency; the principal condition being the co-existence of a limb secondarily corrupted, which, clearly from the results, so overweighted the boy's vital energy as to render it inoperative for the purposes of repair. With the removal of the limb the conditions were changed, and the balance turned in favour of those powers, and recovery. It is due, Mr. Gay said, mainly to the urgent advice of his colleague, Mr. Cripps, that resort was had to amputation in this case.

KING'S COLLEGE HOSPITAL.

CASE OF DISEASE OF KNEE-JOINT.

(Under the care of Mr. HENRY SMITH.)

E. B——, aged sixteen years, a healthy-looking girl, was admitted on Dec. 3rd, 1877, suffering from pain, stiffness, and swelling of the right knee-joint. There was an indistinct feeling of fluctuation in the joint. The circumference of knee was fourteen inches and a quarter. The limb was put up in M'Intyre's splint, and iodine paint was applied over the part.

Very little relief being obtained by this treatment, extension, by means of the American stirrup, was resorted to on Feb. 9th, 1878, and on the 20th a back-splint was applied in addition. By March 8th the knee had increased in circumference to fifteen inches, and when the knee was examined, under the influence of chloroform, on April 3rd, slight grating was detected in the joint.

On May 23rd the extension was removed, and Scott's dressing was applied.

During the months of June and July periodide of ammonium was applied twice, which acted as a powerful counter-irritant. In the latter month the back-splint was kept applied, and extension of the limb kept up by means of the American stirrup.

On August 1st there was not much pain in the joint while patient lay quiet, but pressure applied to the sole of the foot and to the patella caused a good deal of pain.

On Aug. 10th, the patient being put under the influence of ether, Mr. Smith made an incision about an inch and a half long on each side of the patella, observing Lister's antiseptic

precautions. Through these incisions he was enabled to examine the joint with his finger, and found the patellar surface of external condyle and the under surface of the patella to be rough, but no other change in the joint. A drainage-tube was passed through the joint from one opening to the other, and a horsehair drain was brought out at the most dependent part of the joint on each side. The patient suffered rather severe pain two hours after the operation, and ten drops of tincture of opium were given. Evening temperature 102·8° F. Draught repeated in the night (1.45 A.M.)

Next morning temperature was 101·4°. The wounds were dressed; there had been free discharge of serum, but the wounds looked well. Evening temperature 102·4° F. The patient was sick twice during the day.

On the 13th, temperature 101·6°. Patient looked heavy about the eyes, and complained of headache aggravated by almost any loud sound. Evening temperature 102°.

On the 15th, temperature 101·8°; headache severe; sick once. Evening temperature 101·2°; bowels constipated; aperient draught given.

18th.—Temperature 102·4°; still headache; knee painful on any movement of leg. At 8 P.M. patient began to mutter incoherently.

On the 20th the temperature was 100·4°. She passed urine and fæces unconsciously. Lay quietly, but in a semi-conscious state. Poultice applied to knee at 4 P.M. Evening temperature 101·4°. At 11 P.M. hæmorrhage to the amount (as far as could be determined by the clots and staining of the bedclothes) of ten ounces occurred from the outer and upper incision. Twitching of face.

She gradually sank and died at four o'clock on the morning of the 23rd.

Necropsy.—The right knee-joint was considerably enlarged, puffy, but solid to the feel. The longitudinal incision on each side ended in the joint. The limb was but very slightly distorted. On laying open the joint, the patella was found to be almost entirely devoid of cartilage, and presented a rough granular surface; the patella-surface of the femur presented a similar condition. The cartilage on the external tuberosity of the tibia was red, but smooth and polished, and on taking a thin layer of the articular surface off with a saw, the bone of this tuberosity was found to be very congested, and a small abscess existed near its anterior margin, containing about half a drachm of bloody pus. This abscess was only separated from the joint by the thin layer of congested cartilage. The synovial membrane and the soft tissue around the joint were considerably thickened, and the ligaments were a little softened. There was no pus in the joint, nor was any confined in the parts around it. The thoracic and the abdominal cavities, with their contained organs, were carefully examined, but nothing worthy of note found. Cranium: On cutting through the membranes a large amount of thin fluid escaped. The convolutions were flattened, and the sulci much diminished in depth. The pia mater at the base of the brain was very vascular, and in the fissure of Sylvius and along the anterior median fissure they were opaque, and unusually adherent in places. On opening the brain all the ventricles were found considerably dilated, some fluid still remaining in them. The choroid plexuses were much thickened. The cerebral substance was soft, but not otherwise changed.

Remarks.—It may be worthy of remark that the great dilatation of the ventricles, without any laceration of the brain-substance, as well as the thickened condition of the choroid plexuses and membranes of the base of the brain, seem to indicate disease of old standing.

The state of the joint also showed that it was impossible to ascertain by the finger the actual condition, for the cartilages of the tibia were smooth and polished. If the congested state of the outer cartilage had been seen, the condition of the underlying tibia would have been suspected, and excision of the joint immediately performed. The chief interest in a practical point of view lay in the extreme difficulty or impossibility of diagnosing the condition of the parts connected with the joint. Mr. Henry Smith was loth to perform any severe operation, because, in the first place, the general health appeared but slightly affected. The pain even was comparatively trifling, and, indeed, when the limb was at perfect rest, the symptoms, barring the swelling, were completely in abeyance. However, it is perfectly clear that any partial attempt to get rid of the disease was useless, and that amputation or excision was the only measure to be adopted.

MANCHESTER ROYAL INFIRMARY.

A CASE OF GASTROSTOMY; NECROPSY; REMARKS.

(Under the care of Mr. S. MESSENGER BRADLEY.)

FOR the notes of the following interesting and instructive case we are indebted to Mr. Williams, dresser.

L. H——, aged fourteen, was admitted into the infirmary on Nov. 2nd, 1877, suffering from stricture of the œsophagus, the result of having inadvertently swallowed some washing-fluid (caustic soda) four months before. When the lad came into the hospital he could not even swallow liquid food, and three nutritive enemata each day were ordered. Attempts were made from time to time to pass a bougie through the stricture, which commenced opposite the upper border of the sternum, but it was found impossible even to enter it, although the finest instruments were employed, some of which were expressly made for the case.

As the lad was slowly starving, in spite of the enemata, gastrostomy was performed on Nov. 17th, the stomach being opened close to the cardiac extremity. The left lobe of the liver overlapped and hid the stomach, and the transverse colon was much distended and very thin.

The boy was fed by the bowel alone for the ensuing forty-eight hours, but on the third day some milk was administered through the stomachal mouth. The operation gave wonderfully little inconvenience or pain at any time, and, as the post-mortem examination showed, was not followed by any peritonitis or other inflammatory mischief. The temperature never rose above 99°, and for the most part was below 98°. The morning before he died it sank to 95·4°. At first milk alone was administered through the opening, but after the first few days beef-tea and milk were given alternately. The enemata were continued throughout. The stomach was so small that it was found impossible to introduce more than three ounces at a time, and so slow was digestion that it did not allow of more than three feedings in the twenty-four hours. During the last week of the boy's life Dr. Gamgee kindly undertook the dietetic management of the case, and, at his suggestion, a drachm of Lœflund's malt extract and five grains of pepsine were added to the milk, and peptones, specially prepared by Dr. Gamgee, were administered by the bowel. Both before and after the operation the boy suffered from thirst; warm-water baths materially relieved this symptom before the stomach was opened, but afterwards it was not thought advisable to continue them.

In spite of every care, and for no reason apparently beyond the small size and imperfect action of the stomach not permitting sufficient nourishment to be taken, the boy gradually but steadily sank, and died of inanition on the twenty-eighth day following the operation.

The following notes of the post-mortem appearances are by Dr. James Ross, the pathological registrar.

Necropsy, forty-eight hours after death.—No rigor mortis. The body is greatly emaciated. The vertebral column can be felt in contact with the abdominal walls, and the eyes are sunk in their sockets, while the skin of the face appears to be closely applied to the bones. The circumference of the body on a level with the umbilicus is 18 in., of the upper part of each thigh 8in., calf 6 in., upper arm 4½ in., forearm 4¾ in., and neck 8½ in.; length of the body 53½ in. The anterior surfaces of the trunk, neck, and extremities are covered by small purpuric spots. A longitudinal incision is observed in the epigastrium through which the finger can be passed into the anterior of the abdominal cavity. On making an incision through the abdominal parietes, it is noticed that there is complete absence of subcutaneous fat. The large intestines are distended with semi-solid material, which feels pulpy under the finger. The sigmoid flexure is dilated and lengthened so that several coils of it are lying in the pelvis. From the upper end of the rectum to the upper end of the sigmoid flexure measures 13 in. The transverse colon is slightly adherent to the abdominal parietes opposite to the lower part of the external incision already mentioned. The lower margin of the right lobe of the liver is situated three quarters of an inch above the lower margin of the false ribs. The thoracic organs occupy their normal positions. Both ventricles of the heart are empty with the exception of a small decolorised clot found in the right ventricle. The heart is small, weighing 3¼ oz., but its texture is firm, and it is in other respects normal. There is complete absence of

fat from the surface of the right ventricle. Both lungs are of a light-grey colour anteriorly, but dark-red posteriorly, and a considerable amount of frothy serum can be squeezed from the posterior portion after section; but every part of both organs crepitate on pressure, and float in water. Some of the bronchial glands are enlarged, and one of them on the right side is cretaceous. The thoracic duct is not distended, and not pressed upon by enlarged glands. The liver weighs only 15¼ ounces, and is relatively contracted in size. A small portion of the anterior surface of the left lobe is adherent to the abdominal wall at a point opposite to the upper end of the external incision. The organ gives a leathery feel to touch, and on section its texture is seen to be of a uniform dark-red colour, and each lobule is not much larger than half the normal size. The spleen weighs rather less than an ounce, but it appears in other respects healthy. Each kidney weighs two ounces and a half, but, with the exception of being rather small in size, the organs are healthy. The œsophagus is normal in the upper inch and a half of its length; but the tube is so narrowed opposite the cricoid cartilage that it is almost if not entirely impervious. A probe cannot be passed through without rupturing the tissues. From this point down to the cardiac end of the stomach the tube is narrowed in different places, so that in the lower part of its course it forms a series of small pouches separated by constrictions. There is an opening in the anterior wall of the stomach an inch below the cardiac end, and extending transversely across the great curvature. The margins of this opening are so closely adherent to the margins of the external opening in the epigastrium already described, that the skin is continuous with the mucous membrane of the stomach. The stomach is five inches and a half long, an inch and a half broad at the pyloric, and two inches and a half at the cardiac extremity. The walls of the organ are very thin, more especially at the great *cul de sac*. The mucous membrane is congested, and about a dozen superficial ulcers, each being about the size of a threepenny-piece, are scattered over its surface, the largest proportion being towards the pyloric extremity. The small intestines are contracted and almost entirely empty. The mucous membrane is congested, but no other abnormal appearances are noticed. The ileum contains a small quantity of liquid fæces. The mucous membrane of the whole length of the large intestine is much congested, but not ulcerated. This portion of the bowel contains a large quantity of semi-solid fæces, of whitish colour, something like the stools of infants when the milk is not entirely digested. This substance has a fæcal odour, but no putrid smell.

Microscopical examination. — The structure of the liver is observed to be much altered. When a section is examined in glycerine, the lumina of the cut intralobular venules are seen to be increased in size; their walls are thickened, exceedingly transparent, presenting a hyaline, homogeneous appearance, and destitute of any recognisable structure. On staining the section with a weak solution of the chlorhydrate of rosaline, the walls of the veins assume a brilliant pink tint, very like the reaction of amyloid disease; but, unlike amyloid disease, they do not stain with iodine, and the arterioles are unaffected. The liver-cells in the central portion of the lobules are almost completely destroyed, and the spaces are occupied by networks of capillaries, in the meshes of which small cells of irregular contour are seen, which are evidently the remains of the liver-cells. In the middle and outer areas of the lobules the liver-cells are diminished to about one-half of their normal diameters; their contents are granular, and each possesses a very clear nucleus. The rows of the liver-cells are separated from each other by wide-gaping capillaries, outside the walls of which a considerable number of lymphoid corpuscles are noticed. The structure of the voluntary muscles is also considerably altered. All the muscular fibres are diminished in size, and some of them are much smaller than others. The transverse striation is indistinct in the smaller fibres, and a few of them assume a bright pink tint with the chlorhydrate of rosaline; while the larger fibres, with distinct striation, maintain a dull red. There is a relative increase of connective tissue, evidenced by the increase of the spaces between the fibres, and the large number of nuclei which are to be seen on the perimysium internum and in and around the adventitia of the small vessels. No marked changes are found in the walls of the œsophagus, stomach, or intestines.

Remarks by Mr. BRADLEY.—I have but two remarks to make upon this case. In the first place it certainly goes to show that in itself gastrostomy is not a difficult or a very dangerous operation, although, in my opinion, it is an operation which should never be undertaken for what we may term traumatic stricture of the œsophagus, provided any instrument whatever, no matter how fine, can be passed through the obstruction, since it is always possible, either by gradual dilatation or by the adaptation of some such plan as Wakley's or Holt's urethral methods, to more speedily and effectually dilate the strictured portion. In the second place, this case seems to afford, through the careful post-mortem of Dr. Ross, an instructive example of the appearances met with in cases of death by starvation, and is, therefore, valuable in a medico-legal point of view, while at the same time it serves to show that under certain circumstances death from inanition may occur when the greatest possible pains are taken to keep the patient alive with food properly prepared and carefully exhibited.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

The Elastic Bandage.—Suprapubic Cystotomy for the relief of Stricture.—Litholapaxy.

THE ordinary meeting of this Society was held on the 25th ult., Mr. Callender, F.R.S., President, in the chair. There was a large attendance, and the greater part of the evening was spent in the discussion of the various methods of operating for impermeable strictures of the urethra, arising out of communications from the President and Mr. Howse upon cases in which suprapubic incision into the bladder was resorted to. Mr. Howse's case, fully reported here, was a remarkable instance of repeated and long-continued surgical interference, culminating in the suprapubic operation before the stricture, which was of traumatic origin, was successfully dealt with. At the close of the meeting Dr. J. H. Bigelow, of Boston, Mass., successfully demonstrated his newly-invented apparatus for the removal of fragments of stone from the bladder after lithotrity. Unfortunately, time did not permit of any discussion upon the procedure, but Dr. Bigelow's remarks were listened to with great attention. In another part of this issue will be found a full description of the instrument by that gentleman.

The PRESIDENT brought before the Society two cases illustrating the good effects of Martin's strong elastic bandage; the one, a female sixty-four years of age, with a varicose ulcer of seven years' duration, which healed within two days of the commencement of the use of the bandage, and remains well, the patient herself managing the application of the bandage. The second, a case of chronic effusion into the knee-joint of rheumatic origin. The limb could not be raised from the bed when the rubber was first applied, but a few days later the patient was able to walk about, and the effusion into and thickening of the tissues of the joint had subsided. So far as his present experience went, Mr. Callender thought that these bandages would prove of great use in hospital practice.

The PRESIDENT then read brief notes of four cases of Intractable Stricture of the Urethra treated by the aid of Suprapubic Incision into the Bladder, an operation the suggestion of which is due to John Hunter,[1] in which, the bladder having been punctured above the pubes for retention, a catheter was passed through the opening into the bladder to the stricture, acting as a director towards which the stricture was divided in the perineum. The first two were cases in which the bladder was punctured above the pubes for retention. At a later period the stricture was divided in the perineum, the position of the urethra on the further side of the obstruction being guided to by a catheter introduced by the suprapubic opening. Each patient made a good recovery. The third case illustrated the difficulty of opening the urinary bladder when contracted and empty.

[1] See Palmer's edition of Hunter's works, vol. ii., p. 292.

After its puncture the patient, who did well so far as the mere operation was concerned, slowly sank from renal disease, and died from uræmic poisoning. In the fourth case, under the care of Dr. MacDougall, of Carlisle, the preliminary puncture of the bladder above the pubes was followed by great relief, but the final operation upon the urethra was never practised, the patient's life being suddenly cut short by profuse hæmorrhage from an artery exposed at the base of an ulcer of the pyloric end of the stomach. These cases, Mr. Callender said, showed the possible advantages of the operation, which might be practised in certain rare cases. They also illustrated the difficulties it might be associated with, especially in attempting to open a contracted bladder, and the complications which, in such severe cases, might co-exist.

Mr. H. G. HOWSE read a paper on a "Case of Suprapubic Incision into the Bladder for the Relief of Traumatic Stricture of the Urethra, caused by Compound Fracture of the Pelvis." Alf. B——, aged twenty-two, was admitted into Guy's Hospital on Sept. 18th, 1877. Seventeen months before admission he had sustained a very severe compound fracture of the right side of the pelvis, from a large piece of stone falling upon it. His left ankle-joint was dislocated at the same time, and the urethra ruptured, probably by the fractured ischium. He was taken at once to a provincial hospital, where the dislocation was reduced and the limb put in splints. Catheters were at first passed, but they were not continued, and subsequently it was found impossible to introduce any. His constitutional state, at first extremely bad, gradually improved, and at the end of seven months he was discharged from hospital for change of air. At this time he was passing the bulk of his water, with great straining, from the wound, and from the abscess-sinuses in the groin. A little dripped from the penis. Repeated attempts at catheterism had entirely failed. After two months he was readmitted into the same hospital, and on one occasion a catheter was introduced from the wound into the bladder. A week later perineal section was performed, with the catheter as a guide, and a No. 9 gum-elastic catheter was introduced into the bladder from the median line of the perineum. This was continued for many weeks, but at last, in the necessary changes, it was found impossible to introduce instruments of equal size, so that by degrees smaller and smaller sizes were used, until, finally, none at all could be introduced. After six months' stay in hospital he went home in much the same state. Attempts were then made at home, during two months, to pass instruments, and once he took chloroform; but this failing, he was sent up to Guy's. During the first few weeks after admission various operative procedures were adopted, with the view of finding the end of the vesical portion of the urethra, or providing the patient with an easy mode of exit for the urine. These procedures may be summed up thus: 1. The sinuses were carefully slit up and explored to see if they could be traced into the urethra. 2. A "Cock's" operation was performed in order to open a way into the bladder through the prostatic portion of the urethra. This resulted in showing that the urethra was not in its normal position, probably from the contraction of the dense mass of cicatricial tissue which occupied the lower aperture of the pelvis. The operation therefore failed. 3. Cystotomy was performed from the perineum through the prostate. This gave so much relief to the patient that it was determined to try to connect the new prostatic passage with the penile urethra. This was accomplished towards the end of December, and by the beginning of April the new passage in its entire length appeared to be pretty well established. A sharp attack of cystitis, produced by the patient taking exercise with a somewhat stiff gum-elastic catheter in him, here interrupted his convalescence for some time; and after this had disappeared, it was found that when he attempted to pass urine without the catheter it would *begin* to flow through the new passage, and then would suddenly stop altogether, just as if a calculus had fallen against and plugged the new aperture. The reason of this appeared to be that the cul-de-sac of the old prostatic urethra ran down by the side of and close to the new passage, and that when micturition took place the urine entered and filled the old cul-de-sac as a bag, and this in its distended state pressed on and obliterated the new passage. Hence, to complete the cure, it would be necessary in some way to utilise the cul-de-sac of the prostatic urethra. With this object, the following operation was resolved on:—On June 25th the bladder was washed out with thymol solution, and then over-distended with some of the same fluid. A suprapubic incision was then made, and the surface of the bladder exposed. One or two double sutures were then passed into its muscular coat, on either side of the intended puncture. On the puncture being made, the thymol solution welled out freely, and was recognised by its smell. A large curved sound was then passed into the viscus, through the puncture, down to the neck of the bladder, and thence into the prostatic urethra, where it was arrested by the cul-de-sac. This sound was then given into the assistant's hands to hold steadily, and the patient put into the lithotomy position. The point of the sound could be felt from the rectum, in spite of the dense cicatricial tissues by which it was surrounded, and it was seen to deviate very considerably to the right side; hence accounting for the failure in finding it by "Cock's operation." Incisions from the perineum readily reached it, and a director was passed into the bladder on this side. On this director, subsequently, a No. 12 catheter was passed into the bladder. The large sound was then removed from the hypogastric incision, and the wound in the bladder closed by carrying the sutures across the incision, threading them in, as for a cleft palate operation. The external skin wound was left open to granulate up. No constitutional disturbance followed this operation, which was performed under the carbolic spray in all its details, though recognisedly it was only possible to keep the anterior wound *entirely* antiseptic. No escape of urine ever took place from the hypogastric incision. A month after the operation a catheter was passed the whole length of the urethra into the bladder, and the external perineal wound left to close as far as it would. Early in September the perineal wound was so far closed that the catheter was left out at intervals, and the patient showed that he could pass urine down the whole length of the urethra in a good stream, without any of the previous obstruction. At the present time the patient remains in good health, generally passing the catheter for himself, by preference, about twice in the twenty-four hours, to avoid any possible future contraction in the new portion of the perineal urethra. Mr. Howse urged that this suprapubic operation, though undoubtedly inferior to "Cock's operation" (for opening the urethra at the apex of the prostate) as far as risk to the patient, facility of performance, and general success in results are concerned, may yet be of the greatest value when the latter fails in success, as is shown by this case. Such failure can only be due, when it is properly performed, to some displacement of the urethra from its normal position. In the present case this arose from the contraction of a vast amount of cicatricial tissue produced by a very bad fracture of the pelvis, but it may also be due to the pressure of tumours or to unsymmetrical suppurations about the neck of the bladder, as in some cases of old and repeated extravasations of urine. In the present case the operation was rendered entirely antiseptic by the washing out and injection of the bladder with thymol solution first, prior to the performance of the operation. He pointed out that, even in cases where the bladder is contracted down behind the pubis and filled with foul ammoniacal urine, this may probably be done with success by the use of the aspiratory trocar and cannula after the skin incisions have been made, but before the bladder is incised. In this way, by alternately pumping in and sucking out fluid, the bladder may be thoroughly washed out, and, finally, fully distended with antiseptic fluid, whereby the subsequent steps of the operation are much facilitated. The method of passing the sutures prior to opening the bladder enabled the viscus to be well held up against the external wound, in spite of its collapse after opening, and subsequently they enabled the wound in the bladder to be rapidly and completely closed, whereby all risk of subsequent infiltration of urine was avoided. The patient was shown to the members.

Mr. FURNEAUX JORDAN could not see the advantage of Hunter's suprapubic operation over other operations for reaching the stricture from behind. The risk of opening the peritoneal cavity was great in the former operation, and he himself had devised a method which had been recognised as a distinct advance in surgery. In a case of impermeable stricture with retention (and he would remind members of Syme's dictum, that when a drop of urine could get out an instrument could get in), he placed the patient in the lithotomy position, and, perceiving fluctuation through the anterior wall of rectum, he tapped what proved to be the membranous urethra extremely dilated; and finding he could pass his finger backwards into the bladder and forwards

to the stricture, he was enabled to direct an instrument forwards and to make it emerge at the external meatus. This was a different operation from Cock's, which was simply for relief of retention, whereas here the procedure was intended to enter a stricture from behind. In a case of stone in the bladder complicated with traumatic stricture, he had sounded with an acupressure needle, and cut down upon the stone in the membranous urethra. He had never found rectal fistula follow, for the incision was a clean one, and no sloughing took place. Sir James Simpson, in cases of troublesome micturition in females, used to incise the septum between the vagina and bladder, with no fistula following.—Mr. TEEVAN considered that the suprapubic puncture was in itself a serious operation, not lightly to be undertaken, as numerous deaths had been recorded after it. It was well known that there could never be any stricture in the prostate, and this important fact had been well utilised by Mr. F. Jordan, whose operation of retrograde catheterism, effected from the rectal aspect of the membranous urethra, was a vast improvement over the method brought before the Society. He considered that all impassable strictures ought to be attacked from the perineum by opening the urethra in front of the stricture, and searching for the entrance by insinuating a fine whalebone bougie, as practised by Gouley, of New York, and himself. If, as sometimes happened, the orifice could not be found, there was nothing to be done but to dissect on bit by bit till the dilated urethra at the apex of the prostate was reached. Hunter's operation, practised by Mr. Callender, was severe and dangerous.—Mr. HULKE referred the Society to an article contributed to Pitha and Billroth's Surgery, by Professor Dittel, of Vienna, some few years ago. The writer does not claim it to be a complete treatise on the treatment of stricture, but deals only with those methods he had himself proved useful. He describes clearly and fully suprapubic tapping from a large experience (some twenty-seven or twenty-nine cases) very rarely leading to extravasation. He also describes an operation he attributes to Brosinard, of passing a curved instrument from the bladder forwards through the prostatic urethra to the stricture, and meeting it by another instrument passed per penem. Also the operation of opening the urethra by external incision in front of the stricture, the lips of the urethral opening to be carefully held asunder, thus exposing to view the interior of the canal; then, with fine, flexible probes, &c., the contracted opening of the stricture sought for, found and opened, and the catheter passed into the bladder. Dittel also describes opening the urethra by careful median perineal dissection behind the stricture, then, with fine probes repassed forwards, finding and opening the stricture, then passing the catheter into the penile urethra forwards, and into the bladder—the procedure, indeed, just referred to by Mr. Jordan. Lastly, when the urethra behind the stricture cannot be found by dissection in the perineum, and a catheter must be got into the bladder, then the knife is pushed on into the bladder through the prostate, as Mr. Howse had done in the course of his case. In fact, the difficulties being similar, it is but natural that similar devices for overcoming them should occur independently to those who treat such cases.—Mr. MAUNDER said that suprapubic tapping for retention was not free from danger, because of the not infrequent occurrence of urinary infiltration, which did not occur in rectal puncture. In the instances of empty bladder, opening this viscus above the pubes had proved difficult and dangerous from an operation point of view, and probably if repeated might prove fatal from urinary extravasation. Cock's operation of opening the membranous urethra through the median line of the perineum, would have been sufficient. In Mr. Howse's case the conditions seemed to be very peculiar and exceptional, and the method employed justifiable. Mr. Maunder had once had occasion to perform Mr. F. Jordan's operation, and was surprised at the facility with which it was accomplished.—Mr. HULKE had distinct recollection of some four or five cases of diffuse spreading œdema from urinary infiltration after puncture of the bladder through the rectum having been recorded during the past few years.—Mr. MORRIS had recently under his care a man aged forty-five, who, for twenty-five years, had not passed urine through the meatus, having suffered all this time from stricture following gonorrhœa and traumatism, with urinary fistulæ. He was admitted into hospital lately with retention of two days' standing, and, after attempts at entering the passage through the fistulæ had failed, Mr. Morris managed to pass some fine catgut through the stricture, the patient being under chloroform. The next day the catgut had swollen, and it distended the passage so that a No. 1 catheter could be passed, and from that time instruments of larger size, up to No. 8, had been passed, and the penile fistula was closing up. Such a case showed that a very small passage might exist although no urine could find its way through it.—Mr. LISTER said that, whatever were the merits of the operations noticed respectively by Messrs. Callender and Furneaux Jordan, there could be no doubt that if the stricture could be treated from the perineum it was better to do that than to attack from the bladder either by the suprapubic or rectal operation. He was not sure whether Gouley or himself was the first to perform an operation which he had never found to fail—viz., that of freely laying open the urethra upon a large-grooved instrument passed down to the stricture, then carefully inspecting the seat of stricture, and noting where the natural mucous membrane ceased; the passage could thus be clearly seen, and an instrument being introduced, the urethral wound could be closed over it. In some of the cases that had been alluded to he had noticed that instruments of the calibre of No. 3, or even larger, had been passed from behind forwards, and made to emerge at the meatus; if so, surely such cases could have been attacked by the perineum. False passages were the greatest difficulties the surgeon had to contend with, and often a manœuvre only succeeded, as in a case he saw recently of stricture about the bulbous portion, and perineal fistula, where a full-sized instrument could be made to enter the bladder by manœuvring, but never when the concavity of the instrument was upwards. But in cases where all manœuvres fail, even though the stricture be not small, it was better to operate from the perineum.—Mr. BRYANT asked the President for his opinion as to the value of the operation he had brought forward. As he had not stated it, possibly he was not favourable to it. For himself, he agreed with Mr. Lister that no one would think of entering the urethra from the bladder, except under very exceptional circumstances—e. g., when the urethra had become displaced, as in Mr. Howse's case. He believed that the credit of the operation described as Mr. Wheelhouse's was due to the late Mr. Avery.—Mr. RIVINGTON thought the suprapubic operation of value in cases where it was necessary to relieve a distended bladder, for the stricture could be treated from above by the same incision as that for the relief of retention. Mr. Jordan's operation would not meet cases where the stricture was narrowest behind, so that it would seem better always to perform Wheelhouse's operation. Erichsen, in his "Surgery," records a case of urinary infiltration following recto-vesical puncture.—Mr. JORDAN admitted that the operation was an exceptional one; but that, as a rule, strictures are funnel-shaped, with their broader end nearer the bladder, and they were therefore more easily entered from behind.—The PRESIDENT, in reply, said that he had abstained from commending the suprapubic operation, but thought his cases of interest in connexion with Mr. Howse's paper. That occasions requiring it were rare was evident since, in the fourteen years over which these cases extended, in only one instance was it thought desirable to proceed with it, and in that case considerable difficulties were encountered. Hunter himself limited the operation to those cases in which it may be found necessary to puncture the bladder above the pubes. In such cases, Mr. Callender still thought this an operation which could be easily and safely done. He did not think he should ever again puncture the bladder above the pubes when it was contracted.—Mr. HOWSE, also replying, pointed out there was no other course open to him in the case he had related, when on two occasions attempts to open the urethra behind the stricture had failed. When other measures, then, had been tried, and had failed, the suprapubic operation was surely justifiable. Mr. Cock's operation was *not* one merely for the relief of retention, but was planned to give rest to the stricture, and to allow of instruments being passed forwards through it.

The President then introduced Dr. BIGELOW, of Boston, who gave an account of the new operation for removing fragments of stone after lithotrity at the same sitting. He remarked that hitherto no one could say how little damage was done by instruments in the bladder and how much by fragments of stone. The contraction of an inflamed bladder on these sharp fragments must surely produce injury; whereas instruments are smooth and polished. The operation has been performed twenty to twenty-five times with only one death. The instruments employed—the action of

which was ably demonstrated by Dr. Bigelow—are an aspiratory syphon and a new form of lithotrite. The former consists of at one end a metal tube the full size of the urethra, and at the other end a rubber ball and a glass trap. To introduce the tube—which is of the size of a No. 30 to 31 Charrière, and is straight, with an eccentric projection at the end—the meatus must be sometimes enlarged. The tube is first passed well back towards the rectum, the handle is then depressed to the axis of the body, the extremity being thus tilted up to the prostatic urethra, through which it is passed by a rotatory movement. The ball is then attached, and care taken in the first instance to compress the ball before attaching it, so that its first action shall be one of aspirating water from the bladder, and not injecting water into it. If this precaution were not attended to, the bladder might be injured by over-distension. The lithotrite shown was constructed to avoid impaction—a great desideratum in a long operation. It was also locked with the right hand by a turn of the wrist without letting go the fingers. Both these instruments are made by Weiss. The aspirating syphon could be used for washing the bladder and for removing mucus, foreign bodies, &c.

The PRESIDENT having thanked Dr. Bigelow for his demonstration, the Society adjourned.

MEDICAL SOCIETY OF LONDON.

Treatment of Nævus by Sodium Ethylate.

AT the ordinary meeting of this Society, on the 28th ult., Mr. Richard Davy, Vice-president, occupied the chair.

Dr. J. BRUNTON read a paper on the Treatment of Nævus by the External Application of Sodium Ethylate, exhibiting cases in illustration. Case 1. F. S——, aged seven, had, about a week after birth, a small red spot slightly raised on the cheek, which at about the age of four months had developed into a nævus of the size of a half-crown piece, bluish-red, and raised. It was treated, but with only partial success, by ligature and needles, and when the sodium ethylate was applied the growth was of the size of a crown piece. Case 2. Also a female child, where a nævus was seated over the anterior fontanelle, the size of a shilling. In the first case the original nævus yielded in about a couple of months to the treatment, the continued obliteration of the fresh growth lasting for about a year. Sodium ethylate, which was first obtained and used by Dr. Brunton in 1871, is prepared by adding the metal sodium piece by piece to some absolute alcohol in a wide-mouthed bottle; cautious addition of more sodium until effervescence ceases results in the deposition of a crystalline substance—C_2H_5NaO—at the bottom of the flask. The credit of bringing this substance and other alcoholic and ethylic derivatives before notice was due to Dr. Richardson, who, in a communication on the subject to Dr. Brunton, writes:—"When it is brought into contact with water it is decomposed, the sodium becoming oxidised by the oxygen of the water to form sodium hydrate, and the hydrogen of the water going to reconstitute the common or ethylic alcohol. The change of ethylic alcohol into sodium alcohol transforms it from an irritant to a caustic. Laid on dry parts of the body the sodium ethylate is comparatively inert, creating no more change than the redness and tingling caused by common alcohol; but as soon as the part to which the substance is applied gives up a little water, the transformation described above occurs, caustic soda is produced in contact with the skin in proportion as water is eliminated, and there proceeds a gradual destruction of tissues, which may be moderated so as hardly to be perceptible, or may be so intensified as to act almost like a cutting instrument." Speaking of the practical uses of sodium and potassium alcohols, the same writer says that he does not yet see the means of applying them internally, but predicts for them a very extended application for external purposes, they being most potent caustics—e. g., for the destruction and removal of malignant growths beyond the reach of the knife, by application to the surface, or by subcutaneous injection into the growths. Applied direct to the unbroken skin, their destructive action is less painful than would be expected, and when pain is felt it may be checked quickly by dropping upon the part a little chloroform, which decomposes the alcohol, converting it into a chloride salt and ether. Dr. Richardson had also found these alcohols to dissolve some of the vegetable alkaloids—e. g., opium; and thus a way may be opened to one of the greatest needs in medicine—a sure, rapid, and painless caustic. "The caustic alcohols may be used in combination with local anæsthesia from cold. A part rendered quite dead to pain, by freezing with ether spray, could be directly destroyed by the subcutaneous injection of caustic alcohol, a practice very important in the treatment of poisoned wounds, such as the wound from the bite of a snake, or a rabid dog. It is by no means improbable that some cystic tumours may be cured by the simple subcutaneous injection of a little of these fluids, after destruction of sensibility by cold. Potassium and sodium alcohol, added to the volatile hydride of amyl, dissolve in the hydride and produce a caustic solution. When this solution is applied to the skin the evaporation of the hydride takes place, and a layer of the caustic substance is left behind. This application was of value to the surgeon." The author, continuing, said that, compared with the action of nitric acid, there was but little destruction of the epidermis, and he considered that the sodium ethylate acted as an astringent, and the pain was not so severe as that caused by nitric acid. In his cases hardly any scarring ensued.—Dr. RICHARDSON expressed his deep satisfaction that one of the remedies he had introduced into practice in 1870 as the outcome of physiological research had proved so useful, and thanked Dr. Brunton for his recognition of the same. He referred to two cases of nævus, one of large size on the scalp, that he had successfully treated in 1870 by the application of sodium ethylate, and then proceeded to refer to the use of the ethylates in cases of scirrhus, and explained the strength of the solution that should be used, its mode of application, and the *rationale* of its action. The ethylates have not yet been administered internally, but they may prove of value, and, moreover, may clear up some difficult points in therapeutics—for example, the action of potassium iodide, a salt which is readily decomposed; and he rather inclined to the belief that the chief agent in the absorbent action of the salt was the liberated potassium, and not the iodine.—Mr. ADAMS said the objection to the knife is the subsequent cicatrisation, for small scars may grow and become unsightly. He preferred a subcutaneous operation, and caustics had frequently failed in his hands. He asked Dr. Richardson how the ethylate acted. Was it by absorbing water, or by acting as an astringent?—Dr. RICHARDSON replied that a chemical change takes place; the ethylate takes up water from the tissues, re-forming alcohol; the alcohol then coagulates all the albuminous compounds in its neighbourhood, and the soda liberated acts as a caustic, its action being limited by the coagulation caused by the alcohol. The red blood-corpuscles are also acted on, becoming disintegrated and rendered crystalline, while the white are for a time left unaffected. The risk of too great hæmorrhage from the rapid action of the ethylate in cases of pendent vascular tumours, might be met by diluting the ethylate with alcohol so as to promote coagulation.—Mr. MAUNDER thought the process more simple than others usually employed, but even in cutaneous nævi, destruction of the growth was followed by scarring.—Mr. ROYES BELL had never seen a case with so small a scar as that shown by Dr. Brunton. Small subcutaneous nævi do very well when treated by the ligature. He had tried galvano-puncture with but little or no success.—Dr. BRUNTON, in reply to Mr. Owen, stated that the ethylate has little or no action on the healthy skin, that it limits itself to the spot to which it is applied, and that it can be prepared most simply by adding sodium in small pieces to absolute alcohol.—Dr. RICHARDSON said that the preparation was made for him by Robbins, of Oxford-street.

Mr. MCHARDY exhibited a female patient, aged sixty-three, from whose right eye he had recently removed a mature senile cataract. The principal section—that practised and described by Mr. Brudenell Carter—had in this case been made upwards by transfixion, but the point of the Graefe's knife, immediately after making the primary puncture, on appearing in the anterior chamber, had been directed through the iris, and across the posterior chamber of the aqueous humour, so that the lens capsule was lacerated by the knife before it had been directed forward and onward to the counter-puncture, which necessarily included the iris, and preceded completion of the section in

the usual manner. As a result of this manipulation of the knife, a horizontal slit was left in the upper portion of the iris midway between its ciliary and pupillary margin. The portion of the iris above the slit was next excised from its ciliary attachment, and the lens readily extracted by suitable manipulation with the vulcanite spoon external to the globe. The result was a perfectly mobile central circular pupil.

Mr. RICHARD DAVY exhibited a patient, under his care in the Westminster Hospital, with inability to open the mouth, consequent on the formation of an abscess in connexion with a decayed tooth. As there was no loss of nervous or muscular power, he considered the fixation to be due to some affection of the joint, and proposed, under chloroform, to attempt to forcibly open the mouth, and that failing, to excise the joint.

Reviews and Notices of Books.

Lectures on Syphilis. Delivered at the Harveian Society. By JAMES R. LANE, F.R.C.S. London: J. and A. Churchill.

THESE lectures have already appeared in our columns in full, so that our readers are more or less familiar with them. But we are very glad to see that Mr. Lane has consented to publish them in their present form. The aim of the lectures is to give a review of the work that has been done in the study of syphilis since the time of Hunter, to show what has been clearly demonstrated, what appears probable, and what yet remains clouded in obscurity. No one is better able to accomplish such a task than Mr. Lane. He shows that gonorrhœa, which was considered by Hunter to be a manifestation of syphilis, is not "specific," but merely urethritis set up by a local irritant. He points out that the view of the duality of the syphilitic poison must be abandoned when all the facts are calmly considered. Phagedæna he regards as an accident of syphilis, and not specially related to it. He controverts Sir Wm. Gull's aphorism, "Syphilis once, syphilis ever," and shows that, like many other trite sayings, while often true, it has exceptions; that not only may syphilis be cured or wear itself out, but that the cure may be so complete that reinfection may take place. The lecture devoted to the Contagiousness of Syphilis, Inherited Syphilis, &c., is especially clear and useful: no part of the subject is of greater importance than this. The rules laid down for treatment are very simple and lucid. Mr. Lane believes in mercury throughout the course of the indurated chancre, and states that by its use the secondary symptoms may be prevented. He postpones the use of iodide of potassium to the tertiary period of the disease, and deprecates its use in combination with mercury, as they are complementary drugs, each being useful in particular stages of the malady, the one succeeding just when the other fails. No attempt has been made to describe the manifestations of syphilis; this has been often done well before; but we do not remember to have seen so brief, clear, and accurate a statement of our knowledge of the pathology of the disease as is to be met with in these lectures.

Electricity and Magnetism. By FLEEMING JENKIN, F.R.S., Professor of Engineering in the University of Edinburgh. Fourth Edition. London: Longmans. 1878.

THIS work may be consulted with advantage by all who are engaged in the study of physical science, of which electricity and magnetism constitute such important departments. It does not go deeply into the mathematical aspect of the subjects with which it deals, but some knowledge of mathematics on the part of the student is indispensable. The explanations are everywhere clearly and intelligibly given. Here is the account of the speed of signalling:—

"Electricity," he says, "cannot properly be said to have a velocity. It is true that when a circuit is completed at any one point, electrical effects are not produced at other points of the circuit until a sensible time has elapsed; so that, for instance, when a signal is sent through the Atlantic cable it does not produce any effect in Newfoundland simultaneously with the depression of the key in Ireland. The distance divided by the time occupied in the transmission of the signal may be called the velocity with which that particular signal was transmitted; it might even be termed the velocity with which a certain quantity of electricity traversed the cable; but it is not the velocity proper to, or peculiar to, electricity; for, under different circumstances, the same quantity of electricity may be made to traverse the same distance with almost infinitely different velocities. For about two-tenths of a second after contact is made in England no effect can be detected in Newfoundland, even by the most delicate instrument. After '4" the received current is about 7 per cent. of the maximum permanent current which will ultimately flow equally through all parts of the circuit. The current will gradually increase, until 1" after the first contact was made the current will have reached about half its final strength, and after about 3" it will have attained nearly its maximum strength; during the whole time the maximum current is flowing into the cable at the sending end. The velocity with which the current travels, even in this one case, has therefore no definite meaning; the current does not arrive all at once, like a bullet, but grows gradually from a minimum to a maximum."

We find but slight notice of the question of the day—the conversion of electricity into light; and the chapter on the medical application of electricity might be either omitted or considerably enlarged.

Molestias Venereas e Syphiliticas: Exegese dos Doutrinas que a esse respeito interessam, seguida de uma Summula Pathologica e Therapeutica e de uma Formulario Especial. Pelo Dr. J. A. MARQUES. (Venereal and Syphilitic Diseases: an Exposition of all that can be found interesting in relation to them, with Pathological and Therapeutical Summary and a Special Formulary.) Third Edition, large 8vo, pp. 720. Lisbon.

THE present work in its renewed form, now much enlarged, may be said to deal methodically and compendiously with the above diseases in their clinical aspect, history, pathology, and method of cure. It is evidently the result of a laboured and sustained effort; but what we find most noticeable in it is, the pains that have been bestowed to make it a compendium of all that has been produced during the past century, and especially during the past quarter of a century, in syphilographical science. It thus deals for the most part with a period of considerable activity and progress in a field where much had been accomplished previously. With this aim before him, the author has availed himself of every utterance in journals, societies, and monographs in southern or northern Europe, and the task has been performed with a faithfulness which is truly commendable. The whole is duly subjected to the criterion of his judgment, and is assisted to a certain extent by his experience. When we remember that it is principally owing to the efforts of Dr. Marques, through the agency of his former publications, that a knowledge of English medicine is disseminated through the Iberian peninsula, it will not seem strange that a full measure of justice is done to syphilography as it exists in this our country; nor are the German notabilities less amply represented. The author scarcely deviates from recognised and well-delineated doctrines; he has no crotchets or inventions of his own. There will, however, not be wanting some who will say that his orthodoxy, after all, is but French orthodoxy, however he may desire to be impartial. The index to the book is every way admirable. If we allowed ourselves to take an exception to the contents, it would be in the fact that the author is too much cast in the shade. We would readily listen to the voice of his experience, which must be very considerable in this class of complaints; but it is evident that Astruc and not Wallace has served for

a model on this occasion, and that he is ambitious of producing a work in some sort classical rather than original.

OUR LIBRARY TABLE.

Comparaison des Effets de Divers Traitements dans l'Hystérie, précédée d'une esquisse historique sur la Metallothérapie. (Comparison of the Effects produced by Different Methods of Treatment in Hysteria, preceded by a historical sketch upon Metallo-therapy.) By OSCAR JENNINGS. Paris: A. Parent. 1878.—This is one of the inaugural theses for the doctor's degree of the Faculty of Medicine at Paris, and the author has chosen for his subject matters which are at present rather extensively engrossing the Parisian medical world. As a rule, indeed, one may divine what subjects are most in vogue by simply perusing the titles of these inaugural essays, the number of which is legion (e. g., a recent number of *La France Médicale* gives the titles of as many as forty such essays read and discussed between August 5th and 7th of the present year!). The conclusions arrived at by the author, after giving a very extended account of the use of metals as external and internal remedies in past times, and then discussing their modern applications as developed by M. Burq in the treatment of hysterical hemianæsthesia, are not very reassuring. There is something of satire in the last chapter, where he sums up his opinions as to the explanation of "metallo-therapy," and tells us how the effects produced by this means do not differ from those procured in past times by exorcism and animal magnetism. He does not believe that the results can be explained upon any physical grounds—electrical currents or the like,—their inconstancy of action disproving this. Nay, he even goes so far as to add his conviction that the phenomena noted as resulting from the application or internal administration of metals vary with the theory held by the physician as to their mode of production, the convictions of the patient upon the virtues of the metals, and the moral surroundings of the patient. Also that the initial impression made on the patient depends on chance, upon her imagination, her fancy, &c.; that the idiosyncrasy shown for one metal over another is due to the knowledge on the patient's part of the metal employed. But he adds—as a saving clause of perhaps too sweeping an indictment—"Preparations of gold appear to be of use in hysteria." Our space does not permit us to follow the course of argument which leads the author to these summary conclusions; but those who read his pamphlet will find therein much matter that is entertaining, although opinions may differ as to some of the points raised.

Section-cutting: a Practical Guide to the Preparation and Mounting of Sections for the Microscope. By Dr. SYLVESTER MARSH. London: J. and A. Churchill.—In this little book the student will find concise and lucid directions for hardening, cutting, staining, and mounting sections for the microscope. The author makes no claim to originality, and recommends processes in common use among microscopists. Nor has he attempted to treat the subject exhaustively. But we think that his "manualette" supplies a want that is often felt now, when every student and practitioner should be able to prepare his own pathological preparations for the microscope.

The Student's Guide to the Medical Profession. By C. B. KEETLEY, F.R.C.S., Assistant-Surgeon to the West London Hospital. London: Macmillan and Co.—We can heartily recommend this little guide to students and parents. They will find the questions that are constantly arising as to the fees, course of study, &c., answered in a pleasant and readable manner, and withal wisely. Mr. Keetley's advice to parents with lazy sons is very judicious, and we should like to see the course he recommends more often adopted.

A Practical Handbook to the principal Professions. By E. C. PASCOE, editor of "A Practical Handbook to the principal Schools of England." London: Hardwicke and Bogue.—In reference to the medical profession, the regulations of the various examining bodies are first stated; then a few facts about the different medical schools, with details of the Government services. The fees are stated as they were before the late increase, and are therefore not up to date, and form no accurate guide. The author has confused University College with the University of London, the scholarships at the former being described with the regulations for the M.D. of the latter. The other professions are treated in a similar manner.

New Inventions.

A NEW VENTILATING MACINTOSH.

THE great objection to perfectly waterproof clothing has been that it prevents the evaporation of fluids thrown off by the skin, and when these remain the surface is chilled. A thoroughly ventilating Macintosh has therefore long been desired. The requirements of health and comfort have been fulfilled by an ingenious contrivance introduced by Messrs. Bartrum, Harvey and Co., of 23 and 25, Gresham-street, London, and designated the "Ventilatorium." The arrangement is simple and effective. The coat is made with a double layer at those portions of the body where it generally clings most closely, but lifts away from the body in exercise. Invisible apertures are distributed in the external waterproof at a level lower than a similar cluster of apertures in the inner layer of waterproof. The two series of ventilating holes do not correspond, so that it is impossible wet should enter, while the vapours of the body pass out, and falling between the two layers drain away harmlessly. The expedient is, as we have said, entirely effective, and seems likely to satisfy every demand.

DARTON'S NEW IMPROVED CLINICAL THERMOMETER.

WE can recommend this thermometer as the most successful attempt that we know of to produce a self-registering thermometer that does not get out of order. Instead of the ordinary constriction in the tube, just above the bulb, the glass is pushed in and forms a knife edge, cutting off the mercurial column as it rises, and thus making the column itself form its own index. This index, being so much longer than the ordinary one, is more easily seen. After reading it off, the column can easily be shaken down, as in an ordinary thermometer.

VACCINATION GRANTS.—The following gentlemen have received from the Local Government Board gratuities for the successful performance of vaccination in their respective districts:—Dr. W. W. Young, Aldershot, £30 9*s.* (third time); Mr. William Webster, Lynn, £14 10*s.*; Mr. G. Pound, Odiham, £7 5*s.* (fifth time); Mr. George Fisher, Albany District of the Guildford Union, £6 6*s.* (second time); Dr. G. P. M. Woodward, Caterham, £4 6*s.*

BEQUESTS ETC. TO MEDICAL CHARITIES.—Miss Johnson bequeathed £23,000 to endow a hospital at Spalding. Mr. James Broadmead has given £5000 to the Taunton and Somerset Hospital. The Royal Hants County Hospital, Winchester, has received £4000, and the Provident Dispensary £1000, under the will of Mr. Thomas Naboth Rider. The Victoria Hospital for Children, Chelsea, has received £500 under the will of Miss Ellen Ray. Queen Charlotte's Lying-in Hospital has received £450 under the will of Mrs. Ford. The Lincoln County Hospital has received £349 4*s.* 1*d.* under the will of Miss Gibbeson. Mr. John Allnutt has given £100 to the National Hospital for Consumption, Ventnor. The Carmarthenshire Infirmary has received £100 under the will of Mr. J. Griffiths.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 2, 1878.

THE fearful epidemic of yellow fever that is still devastating humanity in the Southern States of America has, as it appears, at last reached a stage at which it is possible to review with some profit the incidents of a calamity that has no parallel in the history of mortality during the last century. So far as we can judge, the disease assumed the proportions of an epidemic in July last. But August was well advanced before we received any reliable statistics as to the rise and progress of the malady. An annotation that appeared in THE LANCET of July 20th announced, indeed, that several ports in the United States had "quarantined" others in which it was supposed that the disease existed. It appears that, in spite of the National Quarantine Act, which became law in the United States in April of the current year, every State can, in matters of internal administration, do that which is right in its own eyes, so that one district may, if it chooses, prevent the inroad of any affected, or, as we take it, suspected, persons from another State. This by the way. The Surgeon-General of the Marine Hospital Service at Washington, Dr. JOHN M. WOODWORTH, has, in accordance with the provisions of the Quarantine Act above mentioned, issued a weekly return of all deaths from epidemic diseases that have occurred in the country, and in this list, of course, yellow fever finds the chief place. We have now received these returns for every week between July 13th and Oct. 12th, and the bill of mortality exhibited is really appalling. As to New Orleans, the report dated July 27th, says that cases commenced in that city about July 12th, and up to the 26th 37 cases and 17 deaths had been reported. The next report showed 158 cases and 36 deaths, with four principal points of infection. On August 10th 236 cases, and 65 deaths, formed the week's roll; making 431 cases and 118 deaths since the returns were furnished. We cannot (although they are before us) quote all the weekly returns. But up to the 30th of August 2877 cases and 867 deaths had occurred in New Orleans. On Sept. 14th the total score in this city had amounted to 6137 cases and 1925 deaths, the last twenty-four hours preceding the date of the report indicating 228 cases and 58 deaths. The report for the week ending Sept. 21st shows, happily, a decrease of 172 cases and 85 deaths, as compared with the previous week, the total, however, being 7538 cases and 2368 deaths. Missing the next week, we reach that ending the 5th ult., which indicated 1754 cases of yellow fever and 360 deaths. And the last report submitted to us, dated the 12th ult., gives for the city of New Orleans alone 988 cases and 340 deaths for the week, 164 cases and 49 deaths during the last twenty-four hours, and since the commencement of the epidemic a fearful total of 11,206 cases and 3400 deaths, showing a mortality of more than 20 per cent. This is an awful list of sickness and death, seldom equalled, and, as we believe, scarcely surpassed even in the annals of famine and war. It represents, however, only a comparatively small proportion of the cases, for the disease, having commenced on this and a former occasion in New Orleans, spread with great rapidity successively to Havana and Matanzas, in Cuba, and Key West, in Florida. Several isolated cases occurred also in the Navy-yard at Brooklyn during the month of July, which were traced distinctly to some ballast brought from Havana in a barque, and thrown down in the immediate vicinity of the navy ship *Vermont*, on which the outbreak took place. The ballast was promptly disinfected and also covered with fresh earth, and the fever ceased immediately. On the 10th of August cases were reported from Port Eades, Memphis, Vicksburg, and solitary cases (imported from New Orleans) at Cincinnati City, Caledonia in Florida, New Albany in Indiana, and Cardanas (but not among the shipping). The first Vicksburg cases, and also those at Memphis, were all traced, and proved to have been imported. A week after, Grenada in Mississippi, and Mobile, were included in the list of fever-stricken places, and the disease was traced in Cincinnati to importation from New Orleans. Canton and Port Gaston, in Mississippi, Morgan City, Ocean Springs, St. Louis, Louisville, were all affected by importation during August, as were also Water Valley, Holly Springs, Leighton, in Alabama, Cairo, in Illinois, Wheeler, Pittsburg (Pa.), and Philadelphia (this last is queried, but the cases were isolated as they came from Vicksburg). In September, Hickman in Kentucky, and Pascagoula, in Mississippi, were included in Dr. WOODWORTH'S weekly report to his Department, as well as Brownsville, in Tennessee, Port Gibson, Pass Christian, Plaquemine, Gallipolis, and cases are also reported on the 14th as having occurred at Jamaica, imported from Hayti. Beloxi, in Mississippi, and Indianopolis, are also included, as well as South Pass, Greenville, and Chattanouga, in Tennessee. During the month just ended (i. e., up to the 12th, which is the latest date for trustworthy information other than by cablegram) the general tone of the official reports has been encouraging, but Grand Junction, in Tennessee, and Water Valley, in Mississippi, are added to the list, the cases having occurred some weeks previously, but not having been reported; and in the last report, dated the 12th ult., the names of Dacatur in Alabama, Jackson in Mississippi, and Paris in Tennessee, appear ending a painfully long list. We have been at the pains to recapitulate categorically, but as concisely as possible, all the names of the places at which cases of the disease have occurred, and place the list before our readers as probably the most correct one of the kind that has yet appeared in England, as it is taken from the abstracts of the Sanitary Reports received at the office of the Surgeon-General of the United States Marine Hospital Service at Washington, under the provisions of the National Quarantine Act, which became law in the States in April of the current year; so that if anyone choose to take up a good atlas, there will be no difficulty in speedily becoming acquainted with the progress of the disease, New Orleans being regarded as the focus. A further perusal of these very useful and excellently compiled abstracts shows that in a large majority of cases, a distinct importation from the focus is made out already, but the precise mode of conveyance—that is, by infection or contagion—is apparently in these abstracts still left undecided. The liberality of a lady, by

name MRS. ELIZABETH THOMPSON, of New York, has enabled Dr. WOODWORTH, Surgeon-General, to appoint a Commission, consisting of four distinguished physicians, "to investigate and report upon the origin and progress of the epidemic." This Commission was appointed on the 1st ult., and the work has already been commenced at New Orleans and elsewhere, as it is arranged that the Commission shall meet on the 19th inst., and report to the American Public Health Association the facts that its members shall up to that time have gathered. A Minute of Instructions to this effect has been issued by the Surgeon-General, and we take leave to suggest that the vast importance of the subject would amply justify the cost of sending over from England a skilled physician to join this meeting of the Health Association, take part in its discussions, and of course glean information the sum and substance of which might be embodied in a report that would be submitted to the Government, represented in this case, we suppose, by the Privy Council, as this particular disease still comes under the special cognisance of that august body. No time ought now to be lost; but there is little doubt that any duly accredited representative of this country, whether sent by the Government or by private enterprise, would be cordially welcomed by the American Association, and be gladly permitted to join in the debate. There are, comparatively speaking, very few medical men in England who are practically familiar with yellow fever. But there are some two or three names that will occur at once to those of our readers who are specially interested in the subject, and fortunately they all reside in or near London, and all have, we believe, sufficient leisure to undertake an errand that could not fail to result in the acquisition of a vast amount of sound practical information, the application of which to sanitary science (and particularly sanitary science afloat) would be invaluable. Two delegates—one with age and experience, the other young, energetic, observant, and quick at note-taking—would be better than one. But there can be no doubt that someone from this country should be sent to the meeting of the Commission.

THE symptoms and effects of valvular disease of the heart may seem to be almost beyond the reach of experimental pathology; but it is not so, and a series of investigations undertaken by Dr. OTTOMER ROSENBACH in the Pathological Institute at Breslau, and detailed in a recent number of the *Archiv für Experim. Pathologie*, possess considerable interest to cardiac pathologists. They indicate some new facts, and confirm in a striking manner the conclusions reached by clinical observers. The points for investigation were:—(1) What influence on the blood-pressure has the destruction of one or of several valves? (2) Does compensation occur immediately, or only after a certain time? How is it produced, and how far is the supplemental power of the heart effective? (3) When, and under what circumstances, is endocarditis produced, and what are the consequences thereof? (4) What conclusions of clinical interest are suggested by the experiments?

The observations were made on dogs and rabbits, both with the assistance of curara and morphia, and (in rabbits) without. The blood-pressure was measured in the crural or carotid artery. The aortic valves were injured by means of a sound introduced into the right carotid artery, the injury to the valves being immediately manifest by the effect on the sounds of the heart and upon the pulse. The mitral and tricuspid valves were damaged by means of the valvulotome of KLEBS, by which the mitral valve can be divided by the introduction of the instrument through the carotid artery into the left ventricle, and the tricuspid valve by its introduction through the jugular vein.

The significance of the first point investigated—the effect of the valvular lesion upon the blood-pressure—is very important. The same forward movement of the blood will require an increased exertion of the muscular tissue of the heart, if a resistance is interposed, as in stenosis, or an increased mass of blood has to be moved, as in regurgitation through the aortic orifice. If this increased power is brought into operation gradually, in consequence of an increase in the muscular tissue—hypertrophy, &c.,—the damage to the valve will be followed immediately by a greater or slighter fall in the arterial pressure. The answer which experiment gives to the question is that there is no such fall. Before and after the operation the blood-pressure is precisely the same. Moreover, immediately after great valvular damage, the blood-pressure may be a little higher than before the operation, probably in consequence of the mechanical irritation of the muscular tissue of the heart-muscle, or of a reflex stimulation through the vaso-motor nerves. When this immediate disturbing effect has passed away the pressure is found to be just the same. The permanent over-action of the heart necessary to maintain the blood-pressure leads to its hypertrophy. The reserve of force which the heart possesses enables it to maintain its due action from the first. This effect is the same whether the valvular change is one by which obstruction or incompetence is produced. It is evident, therefore, that the latent reserve of cardiac force is a very large one, and the reserve is manifestly of paramount importance for the maintenance of the circulation. Several of ROSENBACH'S experiments show that this reserve maintains the pressure, even in the face of grave valvular damage, for many weeks—until, indeed, hypertrophy is developed. The details of the experiments prove that in all cases the first structural change was dilatation, and that the hypertrophy was secondary in time to the dilatation, but never sufficient to effect a perfect structural compensation, although dynamically the compensation was complete. Another point of interest is that there was very constantly developed an aneurismal dilatation of the apex of the heart, and also a fibrous degeneration of the mitral papillary muscle.

With respect to the production of endocarditis, the results may be classed under three heads. In the first group are a series of cases in which, in spite of destruction of a valve, or tearing the chordæ tendineæ, no inflammatory appearances, or, strictly speaking, no deposits of fibrin, were found in the neighbourhood of the injury. This was the case with a few of the dogs and with all the rabbits experimented on. In a second group are those cases in which more or less abundant vegetations of fibrin were found at the seats of damage, but in which the most careful examination revealed no foreign organisms in the deposit. All the cases, with the exception of two, come into this group. The valves beneath the fibrinous deposit presented indications of moderate inflammation and

cellular multiplication. Lastly, there are two remarkable cases in which not only the deposits on the injured valves contained micrococci, but also areas in other organs infarcted by emboli. The post-mortem appearance was exactly that of ulcerative endocarditis, with the usual consequences—haemorrhages in all organs with more or less abundant bacteria in the spleen, kidneys, pleura, intestine, bladder, and retina. These different results ROSENBACH explains as follows:—If clean instruments are employed, and used in the shortest possible time, no inflammatory reaction follows. If clean instruments are used, but the operation done slowly, the soft parts bruised, and the endothelium a good deal damaged, inflammation follows, with an abundant deposit of fibrin. The source of the organisms in the micrococcal endocarditis is obscure.

The lesions of the valves thus produced artificially gave rise, in some cases, to the characteristic murmurs, and in others to none at all. The narrowing of an orifice produced by placing an instrument within it caused no murmur in any case—a very remarkable result which the experimenter cannot explain, but which, we think, finds a ready explanation when the mechanism of murmurs is carefully considered. In all cases in which the edge of one of the cuspid valves was torn, and in most in which a tendinous cord was divided, a very distinct systolic murmur was produced. These fibrinous deposits on the valves seemed to have little influence on the production of a murmur. The difference in this respect between clinical and experimental observation is, no doubt, to be found in the different state of the valves which underlies the vegetations in the two cases. The aortic valves seem susceptible in some cases of considerable damage without the generation of a murmur, although in others a diastolic murmur was heard immediately after the injury. This difference was in part explained by post-mortem demonstration of the fact that the vegetations were capable to a considerable extent of preventing incompetence. The loudest murmur was heard in a case in which there was no deposit. The systolic apex murmur, which is so common in aortic regurgitation, and in this country is commonly ascribed to mitral inefficiency, was noted by ROSENBACH in several cases in which the aortic valves had been injured, but he is inclined, on both experimental and clinical grounds, to associate it with the fibrous degeneration of the papillary muscles, which he finds so frequent a consequence of aortic disease. This degeneration is supposed, however, to produce the murmur, not, as most think, by permitting regurgitation, but by lessening the tension of the valves, diminished tension of these valves, according to an unproven theory of TRAUBE, causing a murmur instead of a sound.

These experiments afford thus an interesting confirmation of the results of clinical experience. They confirm experimentally modern views of the origin of hypertrophy, and the sequence of hypertrophy and dilatation, as stated in recent treatises, and they illustrate several very important facts regarding the origin and symptoms of certain forms of endocarditis.

IT is still charity to provide food and shelter, or assistance of some kind, for the indigent, although the State has, in its wisdom, made the relief of the poor compulsory, and rated the whole population for the purpose. Unfortunately that class of the community which it is especially desirable to impress with right views on this subject is strongly imbued with a tendency to look at the matter in a totally different light. The payment of poor-rates by the humbler classes, either directly or through that mysterious agency "the compound householder," is regarded very much as an investment establishing a claim on the local fund for succour late in life, or assistance in any emergency; and, as a set off against the discredit of hereditary pauperism, the traditional "pauper" pleads an hereditary lien on the moneys paid by his fathers for the assistance of the poor. The assertion of this supposed right, growing out of equity not less than law, is familiar to guardians and relieving officers, and it must not be overlooked among the contributory causes of that assurance with which the dependent classes too generally seek assistance and resent any precautions which may be deemed expedient to prevent imposture and minimise the burden of the rates. In theory, of course, occasional relief is better than continuous support; but the experience of the country seems to be producing a wide-spread conviction that repeated doles of partial assistance are morally bad and economically disadvantageous. We have consistently urged the need of care lest the policy of refusing partial and out-door relief should be pushed to the extreme limits of humanity—in some cases, as we fear, crossing the boundary-line and verging on cruelty. It is, however, manifest that, speaking generally, the practice of giving alms, whether by law or impulse, to relieve the pressing need of the moment, while the permanent succour of the recipient is neglected, can seldom be a judicious procedure. It assumes two conditions: first, that the distress is essentially temporary; second, that the sufferer has within him the power of recovery and self-help, neither of which requisites for the success of the method pursued is found in the case of applicants for State relief. Whether a better, a more prompt, a more effectual system of succour, by giving occasional employment in place of money or bread, without pauperising the recipient, might not be devised, is a consideration which has been repeatedly urged on the public and the Legislature; but, taking the problem of relief as it is presented to us, it must be admitted that occasional and partial assistance has very serious drawbacks and disadvantages, except in the case of the aged and the sick, whom it is cruel to separate from their families and imprison in the workhouses. The casual relief given to tramps is perhaps the worst form of public assistance; but it is manifestly imperative that succour of some kind should be given to houseless wanderers, and the community is content that it should be fenced round with all reasonable safeguards against imposture. The question of the moment is, whether the precautions adopted are not, in their application to considerable numbers of individuals at least, too exacting?

What is known as "the labour test"—that is, a requirement that the casual pauper who has received shelter and food for a night, shall perform a certain task before obtaining his discharge in the morning—has, on the whole, produced a beneficial impression on a peculiarly intractable class of applicants. Not very long ago, the race of tramps went their circuits as methodically as commercial travellers, using the workhouses as hotels, visiting them at regular periods, and leaving written messages on the wall of the

oakum shed, or any convenient part of the building, for their acquaintances, in a manner which left no doubt as to their appreciation of the system of relief extant. The evil of habitual reliance on public hospitality is not extinct, but a notable improvement is apparent, in many districts at least, since the practice of imposing labour as the price of the assistance rendered, or, more accurately speaking, as a test of the verity of the need, has been adopted. The only difficulty which besets the carrying out of this wholesome precaution is the apportioning of the task. It would obviously be short-sighted in the extreme to throw any useless obstacle in the way of the pauper's leaving the ward, and the time and strength exacted must not be so great as to put it out of his power to get quite away out of the district if he be a *bond-fide* traveller. At the same time, it is indispensable that the labour to be performed should be of sufficient quantity or of a nature to act as a deterrent on the mind of the hardened idler. The difficulty of finding employment for paupers and prisoners generally is very great. There is a not unnatural feeling on the part of the breadwinning classes that their industries should not be exposed to competition. The agitation of the mat and rope makers on the subject of prison labour is intelligible, if a little exaggerated. Practically the guardians of the poor are restricted to oakum-picking and stone-breaking as forms of labour which it is possible to use as tests. And it is an inevitable drawback of these, as of other descriptions of labour, that they are unsuitable for many individuals. A magistrate recently announced that, with a view of forming a judgment as to the validity of the complaints urged by casual paupers brought before the Bench for non-fulfilment of their task, he had himself tried the stone-breaking, and found it seriously impracticable. It is easy to understand that to persons unaccustomed to manual labour the use of a heavy hammer may be trying, possibly injurious. The pressing question is, who is to decide whether the excuse urged by any particular "casual" be valid? Obviously the issue involved is medical, and it ought certainly to be decided at once, so that no one may be driven to execute a really hurtful duty by the fear of punishment. For example, a man with hernia, or disease of the heart, or some other grave, though perhaps veiled, malady, ought not to be threatened or coerced into performing the hard labour of stone-breaking.

The difficulty is about calling in the doctor. In workhouses provided with a resident medical officer it may be possible to obtain his opinion promptly, but in other cases the delay and trouble of appeal is a serious embarrassment. The most practical suggestion we are able to make is the following. Most district medical officers are "at home" for an hour in the morning; let any casual pauper who demurs to perform his task, and assigns physical weakness or disease as a reason for refusal, be taken at once to the nearest surgery, and let the fee—for there must be a small fee—payable to the medical officer be inflicted as a fine, with alternative of imprisonment, in the case of malingerers. This expedient would probably obviate the difficulty. We see great reason to hope no merely sentimental objection will be taken to the "labour test" as a principle, and, looking to the circumstances all round, it is not easy to discover a better form of labour than that imposed. Meanwhile measures must be taken to avoid the peril of injury to those upon whom the task is imposed. Safeguards against imposition are indispensable, and it would be an exceedingly regrettable contingency if the occurrence of a few cases of hardship led to any great change in the system of "labour tests," which, on the whole, has worked well.

THE session of the Society of Medical Officers of Health was opened on the 18th ult. by an address from the President, Dr. THOMAS STEVENSON, the lecturer on Forensic Medicine at Guy's Hospital Medical School, and public analyst for Surrey, and recently medical officer of health for St. Pancras. He took for his subject the acquisition and distribution of sanitary knowledge, and dealt with it in a broad, thoughtful fashion, as rare as refreshing in these days of sanitary quackery, general, professional, and administrative. His argument in effect was that every person entering the medical profession should be grounded equally in sanitary science as in medical and surgical, and that in view not only of the possibilities of public sanitary practice opened out to him in the appointment of medical officer of health, but also of the actual necessity of this knowledge for the just practice of medicine and surgery; and, further, in view of the unique position which the medical man holds with respect to his opportunities of disseminating sanitary knowledge. This argument Dr. STEVENSON sustained with the clearness and ability of one who had extensive practical knowledge of the matters on which he spoke, and he endeavoured to indicate the modifications which would be needed in the existing schemes of medical training to bring about such a change as would give to the medical student the opportunity of obtaining so comprehensive an acquaintance with sanitary knowledge during his ordinary course of study as he would urge. Taking the requirements of a medical officer of health as his standard, he adopted the regulations of the University of London as to its examination relating to Public Health as indicating the sort of subjects which it was desirable should be incorporated, or provided for, in the course of medical study, and he attempted to show, with more or less success, that notwithstanding the seemingly formidable array, it was rather an adaptation and modification of existing teaching that was required than additions to it in bulk.

We entirely agree with Dr. STEVENSON in the view that the cardinal question of sanitary education, so far as it touches the medical profession, is one which affects every member of it, and we agree with him in deprecating the irregular specialism which has been forced upon the profession, in the development of special examinations by particular examining bodies, in consequence of the apathy and inaction of the Medical Council and the great metropolitan medical colleges in this important matter. While the Legislature has created a great scheme of medical officers of health in connexion with the public sanitary administration of the country, and has provided that *every* registered medical man may become a holder of this growingly important post, the medical profession, as represented by the Medical Council and its chief corporations, has done nothing to provide for giving just effect to this inexpressibly important provision of the Legislature. On the contrary, by its apathy it has suffered these appointments to become too commonly a dis-

credit to the profession and a detriment to public health administration, and has helped to create another form (here, however, in some sort unavoidable) of bidding for clients by particular examining bodies, and to convert the general provision of the Legislature into a monopoly. It is not too much to say that the whole intention and aim of the Legislature in the creation of medical officers of health and the formation of a new branch of the public service for medical men, has been all but wrecked by the bickerings and jealousies exhibited by the medical corporations, and which, in this respect, are witnessed in their most mischievous guise in the Medical Council and the inability of that body hitherto to grasp the magnitude of this question.

The sanitary education of the medical man, if it is to be anything but a mischievous form of specialism, should apply to every medical man, and become a necessary part of his early training. We are not prepared to accept Dr. STEVENSON'S view in what that education should essentially consist during the period of early professional study. He approached the subject more from its relations, perhaps, to the collateral sciences than from the medical point of view, and thus conveyed the impression that the introduction of the subject specifically in the student's course would involve the addition of other matters to his already overburdened budget. We are disposed to think that the solution of the difficulty is to be found in the development of the study of etiology in our schools. This we regard as the essential foundation of sanitary knowledge, and of the capacity of the medical man for sanitary work, and it is on this fundamental subject that our medical teaching is so deplorably insufficient. Given a competent knowledge of etiology, the particular acquirements for practical sanitary work will not present much difficulty to the medical man, either in his student days or his after-life. Without this knowledge no quantity of the special education suggested in the requirements of the University of London in its examination for Public Health will make a satisfactory medical officer of health.

Annotations.

"Ne quid nimis."

THE PORT OF LONDON SANITARY AUTHORITY.

THE reports of the medical officer of health of the Port of London, Mr. Harry Leach, for the two half-years ending respectively the 31st December, 1877, and June 30th, 1878, have come to hand. The first in order of the two reports deals with the current sanitary work of the port for the period to which it refers, but the second, in addition, contains much information of general interest as to the conditions and requirements of sanitary work. A few figures will show the magnitude of the duty imposed upon the sanitary authority of the Port of London. During the year ending the 31st Dec., 1877, not less than 14,310 vessels were inspected by the sanitary staff, and of these it was found necessary to require processes of cleansing or other form of sanitary amelioration in 754. Again, during the half-year ending 30th June, 1878, 6833 were inspected, and 261 found to require sanitary interference. It is satisfactory to note, even thus early in the Port Sanitary Authority's history—this being the fifth year only of its existence,—a most gratifying and striking illustration of the value of its work, in the abiding sanitary improvement of the shipping frequenting the Port of London. During the first fifteen months of the authority entering upon its functions, 15,845 vessels were inspected, and it was found requisite to issue notices for various sanitary improvements in 2668 of them. In 1875 the number of vessels inspected was 14,847, and the number of sanitary notices issued 1788; in 1876, inspected 13,839, notices issued 1384; and in 1877, inspected 14,310, notices issued 754. We are justified in concluding, therefore, that the work of the Port Sanitary Authority has already produced a most marked effect in improving the condition of the vessels frequenting the Thames. No more striking testimony could be afforded to the able and efficient manner in which Mr. Harry Leach and the other members of the sanitary staff have discharged their duties.

Notwithstanding, however, the large amount of good which has been effected in the sanitary state of the port, it has by no means been such as to satisfy the desires of Mr. Leach, or, indeed, to meet, as no doubt will eventually be met, the health requirements of the port. The authority does not seem as yet, so far as we can judge, to have entered seriously upon its functions in that part of its district which lies between the metropolitan area and Teddington Lock, and we surmise that its present staff is not equal to the whole requirements of the port. Its hospital provision clearly does not meet the necessities of the district—a most important qualification in view of the frequency with which infectious diseases occur on board ship. Moreover, it would appear that it has not yet been practicable to settle the details and a mode of sanitary administration of the port which can be regarded as fairly meeting its requirements. Indeed, it would seem that this cannot well be done without the assistance of the Local Government Board, which is looked to for the decision of vexed questions, and to draw up regulations for the guidance of port sanitary authorities as contra-distinguished from urban and rural sanitary authorities.

Among other important questions which concern the port sanitary authority the condition of the Thames within its district, regarding sewage pollution, as we might expect, has a prominent place. Of the metropolitan sewage outfalls at Barking and Crossness, although not places where many vessels anchor, Mr. Leach remarks: "This authority cannot, however, but be at one with the Thames Conservancy in the belief that the present system still keeps the sewage in the Thames, that it still continues to be conveyed up and down as the tide ebbs and flows (though, of course, much diluted), and that the heavier and grosser particles are deposited upon the banks and the bed of the river." The sanitary aspect of this question is peculiarly a subject for the port sanitary authority, who, indeed, from their position, have a serious responsibility towards the metropolitan public and the population on the banks of the Thames below the metropolis with regard to it. The question has now got into so entangled a state from the opposing results and views of different investigations and reporters, that we doubt whether anything short of a Royal Commission will suffice to unravel it; and we venture to suggest that the Corporation of London, as port sanitary authority—the authority concerned for the sanitary welfare of the port—would do well to move the Government to issue such a commission.

CHEAP SCHOOLS.

OUR attention has been drawn to the great increase in the number of educational establishments advertising exceptional advantages at exceptionally low rates. To judge from the frequency with which these advertisements are repeated, and the number of journals among which they are distributed, it would be thought that such schools must be profit-

able concerns; but this can hardly be the case. Managers of reformatories and training-schools tell us, in their reports, that the cost for each boy in these institutions, with the most rigid economy, averages from sixteen to twenty pounds per annum,—and this, too, when the earnings of the inmates are not included in the calculation. The margin of profit, therefore, in schools charging at the rate of from twenty to twenty-five guineas a year, must be small indeed, even if we consider only the cost of maintenance, without adding the cost of tuition and the salaries of the educational staff. The only way in which such institutions can pay at all must be by keeping the schools always full, and this no doubt is the reason of the lavish expenditure in advertising we have noticed. We have no charge to bring against any existing school, but it must be patent to all who think over the matter that in the hands of an unscrupulous proprietor the system is open to serious abuse. But, even without taking into consideration the possibility of dishonest conduct, it is easy to see that the difference between good and bad management, where the margin of profit is so small, must materially affect the welfare and happiness of the pupils. One proprietor who has had long experience in the business, who has a good connexion, and has not therefore to expend large sums in advertising to keep his school full, may manage to make both ends meet, and even put by a small sum annually, and yet do full justice to the boys entrusted to his care; whilst another, not gifted with business habits, will fall into financial difficulties, and be tempted to stave off bankruptcy by reverting to theories of diet and practical instruction well known to readers of "Nicholas Nickleby" and "David Copperfield." It would be a decided advantage to the public if these schools were placed under a system of inspection; indeed such a course would be beneficial to competent managers who carried on their schools in a *bonâ-fide* manner; whilst in the case of the incompetent an early exposure would lead either to reform or the closure of the school before any great mischief resulted. Schools offering a fair education at a cheap rate are an immense boon to parents whose means are limited. But these persons belong, for the most part, to a class who are not competent to judge of what the nature of the education should be, nor even of the dietetic requirements such schools should afford. It would be only right that facility should be given them for forming an opinion on these points, with a guarantee that all fair requirements should be rigidly met.

DR. BIGELOW AT THE CLINICAL SOCIETY.

THE rumour that Dr. Bigelow was to describe his new method of operating for stone in the bladder—lithotrity, with rapid evacuation—drew a large attendance of members to the last meeting of the Clinical Society. Some disappointment was naturally felt that before this interesting communication was made a weary and useless discussion of an hour's duration on the Treatment of Impermeable Stricture of the Urethra had to be endured. This may, under some circumstances, be a fit subject for discussion by the Society, but it was out of place that evening. The President read notes of cases in which, after suprapubic puncture of the bladder an instrument had been passed up to the stricture from behind, upon which a perineal section had been made; but he carefully abstained from expressing any opinion as to the merits of this mode of treatment. It was naturally supposed that the operation thus prominently brought forward was recommended to the profession, and the different speakers deprecatingly compared it with the simpler and better known operation of Avery. Mr. Callender wound up the discussion by stating that he was not disposed to recommend the operation he had described, having practised it only once in fourteen years at the hospital; that the Society had, in fact, been flogging a dead horse. The real interest of the evening commenced just before the usual hour for adjournment, when Dr. Bigelow was asked to give his demonstration. His operation is not a new one in principle; it is a development of lithotrity, as at present performed, in conjunction with the use of Clover's syringe. Perceiving that two of the obstacles to the success of lithotrity are the repetition of the "sittings," and the presence of sharp fragments of stone in the bladder, he crushes the stone at one "sitting," or in cases of large calculi in two, and at the time of operation removes all the fragments and débris. He has modified the lithotrite, so that the "catch" is secured by a slight rotation of the wrist, while by lengthening the female, and having wedge-like serrations on the male blade, he has rendered it impossible to seize the mucous membrane of the bladder, and unlikely that the instrument will become clogged by débris. The instrument, in fact, can do its work quicker than any other, which is a most important consideration when a stone has to be completely crushed at one sitting. The fragments are removed through a tube of larger calibre than is in common use in this country—No. 31 French—a size with which Dr. Otis has made us familiar, and Dr. Bigelow prefers a straight tube. The syringe with which the stream of water is forced to and fro is an elastic ball, which is fixed on a small stand, and worked with far greater ease than Clover's. Special precaution is taken not to over-distend a small bladder. The reasoning on which Dr. Bigelow has based this operation is sound, and no one who saw his apparatus can fail to admire the beauty of the means he employs. Thus far the success of the operation has been very good, and the fear that some entertained that the bladder would be injured by the prolonged operation has not been realised. We cannot but think that this development of lithotrity will introduce a new era in the treatment of stone, and we await with considerable interest the results of its adoption by English surgeons. A fuller description, by Dr. Bigelow himself, appears in another column.

PERSONS WITH LIVES IN THEIR HANDS.

ATTENTION is again painfully directed to the peril of life which results from the position of persons who are suspected of mind-disorder, which may at any moment culminate in madness with outrage, taking a form which it is impossible to predict. It is not too much to say that these persons go about with their own and other lives in their hands. In a recent melancholy case of suicide—to which we will not more particularly allude—it was stated at the inquest that a doctor had pronounced the deceased "to be suffering from a disease of the brain." The precise nature of the opinion given may have been imperfectly rendered in this statement, but it is abundantly evident that cases of the kind must occur until the treatment of insanity in its various, and especially the earlier, forms is divested of its legal aspect. It must happen to every practitioner to see cases which give him great anxiety, but which he is not prepared to certify. The pains and penalties of being branded as a lunatic are much too grave to be entailed on any except the actually insane. There is no chance of appealing to the prudence of the sufferer himself, and advising precautions, because the law will not permit a man to place himself under the protection of an asylum-keeper unless he has previously been an inmate, and then the forms to be gone through to secure the "privilege" are irksome and involve delay. It clearly ought to be possible to advise a patient who is suffering from a malady which may at any instant render him dangerous to himself or others, to take refuge in a *hospital* for mental disease, with no worse consequences than the loss of a little time if recovery is speedy, and without any of the publicity and legal disability

entailed by certificates; in short, without the drawbacks of the state of lunacy as formulated by the law. It would not be difficult to secure the prevention of abuses, and the stigma of the "asylum" might be obviated, by having a special ward, for the temporary care and observation of doubtful and early cases of mind-disease, attached to every general hospital, so that when a patient went voluntarily, or was removed to a hospital, it might be for any of the maladies to which flesh is heir, and not necessarily for the cause which really prompted the retreat. As matters now stand, we are worse placed than in the days when retreat to a monastery or convent was possible. There is no refuge for the worried and weak, and no means of throwing protection around a mind diseased or distressed.

THE PROVIDENT DISPENSARY EXPERIMENTS IN BIRMINGHAM AND SUNDERLAND.

WE shall watch with interest the progress of the movement for establishing provident dispensaries in Birmingham. The first dispensary was opened a few weeks ago under the auspices of the Mayor. The occasion was signalised further by an approving speech from Dr. Heslop, who always speaks on such subjects with originality and force. The chief drawback to the success of the movement will be found in the fact that a large section of the profession refused their support unless a pledge were given from the existing medical charities to reform their abuses. Without such reform these gentlemen maintained that the movement would fail, or very imperfectly succeed, as, they allege, it has done in Manchester. Apart from this drawback, Birmingham is the very place for testing thoroughly the provident dispensary system on a large scale, though, by the way, the scale must not be so large as to take in classes that can afford to pay medical men in the ordinary way; for it must be remembered that medical men are not properly paid in any existing provident dispensary—not even in the Northampton one. The report expressed the opinion that the movement ought to be comprehensive and inclusive, and that the applicants should not be subjected to any "needless and offensive inquiries into their circumstances." It is all very well to object to inquiry, but if there be not a sound system of ascertaining the general circumstances of patients, the result will be highly unjust to medical practitioners and injurious to those who are shabby enough to claim membership of a provident dispensary while able to pay the usual fees of medical men. There is room for a really complete experiment, but this implies the co-operation and sympathy of the medical charities. The provident dispensary system needs such an experiment. If it proves impracticable in Birmingham, it will be a sore blow and great discouragement to the whole system, and other ways, probably more objectionable, of doctoring the poorer classes, will prevail. We hope the medical charities of Birmingham will see their responsibility in this matter, and act accordingly.

In Sunderland a decidedly original course has been taken. It has been resolved at a special meeting of the governors of the Sunderland Infirmary to establish a Provident Dispensary. And at this meeting the report of a previously appointed sub-committee was substantially adopted. This secures an organic alliance between the infirmary and the proposed dispensary. There is already a dispensary in connexion with the infirmary. The governors have agreed to give this dispensary up for the use of the Provident Dispensary Committee, and to contribute a sum which, including the value of the dispensary premises, will amount to £500 a year. The committee is to consist of governors of the infirmary, and of working men, members of the dispensary, in the proportion of five of the former to ten of the latter. In consideration of the grant to the new dispensary from the infirmary, subscribers will still have a limited right of issuing dispensary tickets. Dr. Douglas, at the meeting, said he thought the infirmary, as a charity, was wrong in principle in establishing a Provident Dispensary, and argued in favour of a self-supporting one. But he added that, though his views were those of the entire profession in Sunderland, he would not oppose the infirmary experiment, provided it were put on a broad basis, and all medical men who chose were permitted to join the staff. This suggestion was not accepted. It is not an easy matter to decide whether the medical staff should be limited in number or not. At any rate it should be large and not exclusive. As to the question of the dispensary being self-supporting, it must be admitted that there is scarcely any instance of a satisfactory self-supporting dispensary. It is curious that in Birmingham the profession should be dissatisfied because the charities stand aloof, while in Sunderland the profession, if Dr. Douglas rightly represents it, is dissatisfied because the infirmary takes an active part in the Provident movement. Our own view is that the co-operation of the medical charities is desirable, if not essential to success, though the co-operation may imply some compromise between severely economic and severely charitable views of medical attendance on the working classes.

THE TROOPS IN CYPRUS.

AS we anticipated, with the subsidence of the great heat there has been a reduction in the prevalence of fever among the troops. It now behoves the authorities to consider what measures are necessary to maintain the troops in a state of efficiency, and to prevent the recurrence of a similar unfortunate state of matters. If they have not already taken any active steps in the matter of clothing, they ought at once to send out abundant supplies for the use of the men during the winter, and not, as in the Crimean war, delay so long that the supplies arrive after the need of them is over. One of the most important preventive measures which could be taken would be to send out flannel shirts, and make it compulsory on the men to wear them. In combination with this an ample supply of blankets should be sent, to prevent the men suffering from the effects of cold in the wooden huts which are to be their quarters during the winter. It must not be forgotten that these huts are by no means suited to keep out the cold, like substantial barracks, and that the regulation amount of blankets, though sufficient for the latter, would prove an inadequate protection against the cold in the huts. We presume that the men have taken with them their great-coats, and that no special provision under that head is required. But while these immediate and pressing wants are being supplied, the authorities must undertake many other things with a view to prevent disease after the cold of winter had passed. In the absence of suitable buildings for occupation as permanent barracks, the provision of a sufficient number of huts to afford ample cubic space for the men, and their erection in well selected situations, is an imperative necessity. The protection of the men in the huts from the heat, either by a double roof or by thatching, and by the erection of verandahs to shade the walls of the huts from the sun, must be undertaken in due time. The planting of belts of the Eucalyptus globulus, the careful draining of the soil around the huts, the removal of all local nuisances, are matters which cannot be begun too soon, and which will require careful supervision and active exertion to have in a satisfactory state before another hot season sets in. We have said nothing of a sufficient supply of pure water, or of the necessity for an adequate and effective commissariat, because these are matters of such very obvious importance that we are fain to believe they must have already been carefully

considered and as far as possible provided for by the General commanding. The special circumstances under which the island was occupied may be pleaded as an excuse for part at least of the shortcomings which have affected the troops so injuriously, but no such excuse will be available if next summer should find the men suffering from defective housing, clothing, or feeding. The authorities at the War Office now know enough of the climate of Cyprus and its effect upon health to be aware of the importance of preventive measures, and we trust that no paltry economy will be permitted to interfere with the provision of everything that may be necessary to save the lives and maintain the efficiency of the men composing the garrison.

THE INTRODUCTORY ADDRESS AT THE UNIVERSITY OF GLASGOW.

THE opening of the winter session at the University of Glasgow took place on the 29th ult., and, as usual, an address was delivered to the medical students. Dr. McKendrick was selected by his colleagues to perform the task. The lecturer is one of the recent additions to the medical staff, and as he has already become very popular as a teacher, and is one of the best of our modern physiologists, the address was anticipated with more than ordinary interest. Whilst duly inculcating the necessity of a thorough study of anatomy, physiology, and pathology as the groundwork of practical medicine and surgery, Dr. McKendrick was most careful in protesting against the separation of these sciences from their practical application to the treatment and diagnosis of diseases, and we are glad to find him laying stress not only on their effect in training the mental powers of the student, but also on their uses in the every-day work of our profession. Physiology especially has been looked upon too much as an independent science, and we are therefore pleased that one of our most successful and advanced investigators should insist on the fact that clinical observation is as necessary for its advancement as experimental research. There are several other topics in the address to which we might advert, but we must be content with stating our entire agreement with Dr. McKendrick in his strictures on the want amongst our average students of a sufficient general education, and of an acquaintance with the principles of experimental physics, zoology, and other branches of elementary scientific knowledge. If these were acquired before a student commenced his medical curriculum, there would be in most cases little necessity for this to be prolonged beyond the usual period of four years, and it is the absence of such knowledge that makes a prolongation of his studentship imperative. We have always maintained that an introductory lecture should be intended for, as well as delivered to, those just entering our medical schools and universities, and we congratulate the lecturer on strictly carrying out this idea, instead of airing professional grievances, or aiming at the senior students or the outside public.

THE LONDON SMALL-POX EPIDEMIC.

THE Local Government Board recently evaded the appeal of the Managers of the Metropolitan Asylum District for an investigation of the causes of the exceptional fatality of small-pox in the metropolis during the past seven years, on the ground that the epidemic of 1876-7-8 had disappeared. It is advisable not to assume with too much confidence that we have yet seen the end of this epidemic. The last return of the Registrar-General shows that during the week ending the 26th ult. four fatal cases of small-pox were registered in London, against five in each of the two preceding weeks. Three of the four occurred in private dwelling-houses in Rotherhithe and Bermondsey, and were of children aged respectively eleven months, four years, and fourteen years. The medical certificates relating to these three deaths omitted to give any information as to vaccination, but the Registrar-General is able to report that the two children of a pork-butcher in Rotherhithe were unvaccinated, and it may be assumed that the infant aged eleven months in Newington had not been successfully vaccinated. During the four weeks of October the number of small-pox patients in the Metropolitan Asylum Hospitals remained almost stationary, being 96, 99, 91, and 97 on the four successive Saturdays. During the same weeks the new cases admitted to these hospitals were successively 15, 15, 8, and 21; the number in the last week of October exceeding the admissions in any week since the middle of August. As only half the deaths from small-pox during October occurred in hospital, it may be assumed that during that month more than a hundred new cases of small-pox occurred in London. This is hardly confirmatory of the Local Government Board's assertion that the recent epidemic has disappeared. The grounds for an investigation of the mal-administration of our compulsory vaccination system in London are, indeed, stronger than ever.

EASY CHAIRS.

OUR scientific contemporary, *Nature* (which with increase of price has not only grown in size, but improved in worth), contains in its issue of Oct. 17th an interesting article on the "Science of Easy Chairs." After noticing the peculiar favourite attitudes of different races, such as the Hindoo who sits on the ground with his knees drawn up to his chin, the Turk who squats cross-legged, the European who poses on a chair, the American who lolls with his feet raised above the level of his head, the writer discusses the physiological causes of muscular fatigue and the best modes of obtaining relief. He sums up somewhat in the following words:—For an easy chair to be perfect, it ought not only to provide for complete relaxation of the muscles, for flexion and consequent laxity of the joints, but also for the easy return of blood and lymph, not merely by the posture of the limbs themselves, but by equable support and pressure against as great a surface of the limbs as possible. Such are the theoretical demands, and these are fulfilled by the bamboo easy chairs manufactured in India, made in the shape of a straggling **W**, which the languor consequent upon a relaxing climate has taught the natives of India to make, and which the rest of the world appreciates.

THE CHARING-CROSS HOSPITAL MEDICAL SOCIETY.

THIS students' society held its anniversary meeting on Friday, October 25th, and there were present many students and their friends, as well as several of the hospital staff. Mr. Wall, the secretary, made a statement which proved the prosperity of the Society, and the really good work done by it in the past year. Afterwards, Dr. Green inaugurated the coming session by an address, in which he dwelt upon the many advantages the Society afforded to students. He specially pointed out how necessary it was for the medical man to acquire the power of speaking in public, because on such power both his professional and social advancement greatly depended.

After Dr. Green's address, Mr. Hird (the president) called upon Mr. Cantlie to present to Mr. Canton a testimonial subscribed by present and past students of the hospital and by the members of the hospital staff. Mr. Canton has for forty years been connected with Charing-cross Hospital and its medical school, and having lately withdrawn from active duty as surgeon to the hospital and lecturer on surgery, has been made a consulting surgeon. The occasion was deemed a fitting one to present him with a recognition of his long services, and it took the shape of a handsome silver salver,

appropriately inscribed, and a purse of 130 guineas. Mr. Canton, who was received with every evidence of esteem, having, in a humorous speech, thanked all for their proof of goodwill, the students and their friends had an opportunity of examining and discussing the merits of various instruments and appliances, of which an excellent selection was supplied by many eminent firms. The whole meeting was a success, and we are glad that such annual gatherings of students are coming more and more into favour at the different medical schools, for they cannot but encourage students and work good to the profession generally.

"SIMPLE (MEDICAL) ADVICE."

THE *Newcastle Weekly Chronicle* proposes to establish in its columns, under the charge of a local medical practitioner, whose name is given, a "Doctor's Corner." This corner is to be devoted to advice and information on "the subjects of health, diet, nursing, treatment of disease, and sanitary matters generally." What is contemplated with respect to the "treatment of disease" may be gathered from the following observations:—"One of the objects of this corner will be to give simple advice. To persons afflicted with simple maladies we will endeavour to recommend simple remedies. But we must caution our readers in the most emphatic manner possible, that all directions for the treatment of disease given here can only be relied upon for cases that are not urgent. Affections of an acute or serious nature imperatively demand the early attendance of a medical practitioner." We welcome every effort of the general press to promote sound information on sanitary matters, whether public or private; but we protest against so mischievous a proceeding as the attempt to make the columns of a newspaper the medium of disseminating so-called medical advice. The very words of the proposition we have quoted ought to condemn it utterly. Who is to judge of the "simplicity" or not of the malady for which advice may be sought? Do any maladies exist so "simple" as those for which the journal presumes to prescribe, for which the patient would not be the better for avoiding the doctor and any "treatment" whatever? Would not the project as to giving "simple advice" be better characterised as a project for promoting that craving for promiscuous physicking which gives rise to the rankest quackery in the country? We regret to find that any member of the profession should have lent himself to a scheme of which the giving medical advice through the columns of a newspaper forms an element, and we trust that, on reconsideration, the editor of the important local journal in which the proposition appears will eliminate this mischievous part from the project in which it appears.

THE CHOLERA AT OUDH.

OUR correspondent at Fyzabad, Oudh, in a communication dated Aug. 22nd, states that the outbreak of cholera there appeared to be over. The affected troops—viz., 1st Batt. 25th Regt., and M. 5, R.A.,—which had been out in camp for a fortnight, had been free from the disease for most of this time, and were shortly to return to cantonments. The Artillery had nineteen cases and sixteen deaths; the 25th Regiment, ninety cases and sixty-one deaths. No officer nor any woman or child of the Artillery had been attacked; though the families of the 25th Regiment had suffered heavily, losing seven women and twelve children. This may be explicable by the fact that the disease broke out in the school-house of this regiment, whereas the Artillery had a small school of their own. Certain insanitary conditions would appear to have determined the first manifestation of the epidemic in this locality, and its history in the camps suggests an extensive infection of the men before they left cantonments, but nearly everything on these points awaits further elucidation. The notorious epidemicity of cholera in the Fyzabad district narrows the question of each succeeding epidemic in cantonments to what was the precise mode of importation in each case. It appears certain that, were it not for the strict sanitation now in force, cholera would be rarely absent from cantonments.

"BOARDING-OUT" v. "WORKHOUSE SCHOOLS."

IT it surprising to find anyone, unless pledged to the maintenance of the exploded system of training in workhouses, extolling the value of these institutions as homes for young children as compared with the "boarding-out system" when properly worked. The assertion that "the physical results of the training" in district pauper schools "are pronounced by physicians, and proved by statistics, to be of the highest order," is so astonishing that we cannot help thinking there must be some mistake as to the fact of any sensible person having made the statement even at a meeting of the Social Science Congress. The reverse is the truth, as must be perfectly well known to the medical officers of workhouses, and all who have had opportunity of forming a practical judgment. We leave to the common sense of the country the question whether it is true that the "outcome of these institutions is of the highest order, enabling children to get good places, and keep them in after-life;" but as to the health and physical question generally we have no hesitation in giving the assertion credited to Mr. Tufnell an unqualified contradiction. The condition of the children in the workhouse schools is very far indeed from being satisfactory to the medical profession, and we have recently pressed for an inquiry as to the causes of the unhealthiness and mortality that prevail. It would be well if the warm advocates of any system or policy would take their own strength of view as a reason for being especially careful not to regard, and consequently to represent, the facts in a way calculated to mislead.

ENGLISH AND SCOTCH LUNACY.

ON the 1st of January last, according to the reports of the Commissioners in Lunacy for England and for Scotland, the numbers of lunatics were in the proportion of 276 and 247 respectively per 100,000 of the English and Scotch populations. Not only is the proportion of recorded lunacy to population thus nearly 12 per cent. higher in England than in Scotland, but the rate of increase of lunacy, especially of pauper lunacy, in recent years has been greater south of the Tweed. Thus, while the proportion of registered lunatics, public and private, per 100,000 of the population, increased in England during the twelve years 1866–78 from 223 to 276, or nearly 24 per cent.; the ratio in Scotland increased from 206 to 247 in the same period, not quite equal to 20 per cent. If we look at pauper lunacy alone, it appears to have shown an increase of 26 per cent. during the twelve years in England, while the increase in Scotland has not exceeded 21 per cent. In one important respect the figures relating to pauper lunacy in Scotland are much more trustworthy than are those for England. The lunatic wards of poor-houses in Scotland are of necessity licensed by the Board of Commissioners in Lunacy for Scotland, and "are under a supervision as close as that given to asylums. Indeed, being specially constructed and administered with a view to the requirements of the insane, they are rightly regarded as succursal asylums for the incurable and inoffensive." It is true that a large number of the English workhouses have wards for lunatics, but it is also true, in the words of the Scotch commissioners, that these wards exist "in an irregular way, under imperfect control,

and without having their functions clearly prescribed." Even the metropolitan asylums for imbeciles at Leavesden and Caterham (a large proportion of whose more than four thousand inmates are more properly harmless lunatics) are not immediately and fully under the jurisdiction of the English Commissioners in Lunacy, as they undoubtedly should be. The effect of Government grants towards the maintenance of pauper lunatics in asylums in recent years has led to an increase in the number of registered pauper lunatics in Scotland similar to that which has occurred in England. The increase in both countries is, doubtless, mainly due to the tendency to register paupers of weak or unsound mind as lunatics, for the sake of the Government grant, who, but for this circumstance, would still have been rated as ordinary paupers. Thus arises the clamour for more lunatic asylums in England, and the cry of an alarming increase of lunacy. If all the suitable insane wards of English workhouses were licensed by the Lunacy Commissioners, and the inmates placed under their close supervision, not only would the pressure upon the asylums be relieved, but the condition of the insane in the English workhouses be materially improved. In Scotland 72·7 per cent. of the pauper lunatics on the 1st January last were provided for in asylums, 8·7 per cent. were in the licensed lunatic wards of poorhouses, and 18·6 per cent. resided in private dwellings. In England, at the same date, only 63·1 per cent. were provided for in asylums, 26·7 per cent. were in the unlicensed lunatic wards of workhouses, and 10·2 per cent. resided in private dwellings. It is scarcely possible to doubt that the Scotch system is preferable to that which prevails in England, with regard both to the welfare of the lunatic and to the interest of the ratepayer.

A HUGE VESICAL CALCULUS.

DR. BROWN, of Barnsbury, brought to the first meeting of the Islington Medical Society, on the 22nd ult., a human bladder containing three stones, weighing in all one pound and a quarter, less twenty grains. The largest stone weighed three-quarters of a pound, less twenty grains; the next half a pound, less forty grains; the third, forty grains. The bladder is thickened and its mucous coat is ulcerated. There had been indications of stone for twenty-five years, and the patient was sounded at that time by two provincial surgeons. Shortly before his death he was again sounded by a London surgeon, who wished to operate; but the patient would not consent, and soon died. The sufferings of the patient were most severe, amounting often to torture, for which he was in the habit of taking a mixture of gin and beer. His death was preceded by dry tongue, pain in the region of the right kidney, twitchings, tympanites, and drowsiness, which passed into coma. The urine during this period contained large quantities of blood and pus. The stones are smooth and of phosphatic composition. The surgeon who wished to operate is probably to be congratulated on the resistance of the patient. The specimen will shortly be given to the Royal College of Surgeons.

CHILDREN SUFFOCATED IN VANS.

A FATAL occurrence which has engaged the attention of the local coroner at Newtown, North Wales, would seem to show that the recent legislation for the residential population of canal boats needs to be imitated for the benefit of those who live in vans. Three children have been suffocated in the van of a strolling player while at Newtown. It seems that six persons slept in a house-van 11 ft. 6 in. long, 6 ft. 6 in. wide, and 6 ft. 6 in. high. The children occupied a bed on the floor, under that used by their parents, which was placed 2 ft. 9 in. above them. There was a fire of coke in the chamber, which had probably burnt longer than was expected; but without this additional source of danger the family existing in a space so circumscribed must have been in continual peril, particularly at the season when, according to traditions of "comfort" which prevail among the poorer classes, every aperture whereby fresh air could be admitted would doubtless be carefully closed. There should certainly exist a power to inspect the dwellings-on-wheels in which a considerable class of the wandering population pass a large portion of their lives and rear their families. It cannot be tolerated that any part of the population should be exempt from conforming to the general laws of health, if only because they are liable to be carriers of contagious or infectious diseases. It would be interesting, for example, to ascertain whether the children of the itinerant classes, including the so-called gipsies, are duly vaccinated.

VOLUNTEER COMMISSARIAT ARRANGEMENTS.

IT is well known that the weakest section of a regular army is almost always that responsible for the supply of food, forage, and quarters. This holds still more emphatically in the case of Volunteer forces, and there is no doubt that the absence of any organised commissariat arrangements at the Cape has caused, and is likely to cause, a vast amount of discomfort and sickness. We read, for instance, in a recent number of the *Cape Times*, that the Volunteer force sent against Secocoeni, and now encamped high up in the Transvaal, has been "for a long time (probably several weeks) entirely without vegetables," so that a chance supply of oranges were sold at the rate of 10*s.* per 100—an enormous price in that country. No alcoholic drinks are allowed in camp, and though that may, under ordinary circumstances, be a very proper arrangement, it is not always wise, in view of the cold and sometimes wet nights, to cut off suddenly all drinks from men who have been accustomed to indulge freely and regularly in them, in addition to ordinary home comforts. There is, indeed, no regular commissariat, and until such a department is established some general code of instructions should be issued to each and every volunteer, as to what he should provide for himself, and the best means of doing so. If special messes of, say, six to ten men were formed for commissariat purposes, and a judicious choice made of tinned meats, tea, coffee, biscuits, &c., with a small supply of good alcohol for emergency purposes, a week's allowance could be carried with, comparatively speaking, very little difficulty. And it should be remembered that, next to fruit and vegetables, milk is probably the best and most "obtainable" article in that country, both in the sense of nutriment and to ward off antiscorbutic symptoms.

WOMEN'S WORK.

SPEAKING on Wednesday last at the distribution of honours and prizes awarded at the annual Oxford and Cambridge Examinations in the Manchester centre, the Bishop of Manchester said he was very much of the opinion expressed by the late Bishop of Orleans regarding the education of women when he said that "the hope of France is in her mothers." At any rate, the hope of England was in her homes, and a home was very much what mothers made it. He agreed with Pericles and St. Paul, when the first gave the palm to the women least talked of by the men, and the second to those who were stayers or workers at home. The harder and ruder toil of life should, he maintained, certainly be done by men; but while he wished women to be educated as highly as they could be, he hoped that when they were educated they would choose those departments of life for which men, at least, thought them best suited.

To those who may object to his lordship's *petitio principii* we would commend a series of suggestive and interesting articles in the recently-issued first volume of "Social Notes," entitled "What women can be and do."

THE GLASGOW MORTALITY RETURNS.

GLASGOW still persists in the preposterous method of publishing the returns of mortality for the city which we have more than once taken occasion to protest against. We have before us the mortality tables of the city for the quarter ending 30th June, 1878. The tables, as usual, are of the portentous size and hideous lithographing which have hitherto characterised them, and, as usual, they are accompanied by the "remarks" of the medical officer, printed in a handy octavo pamphlet. Why the figures of the ungainly lithographed sheets should not be printed with the medical officer's remarks it is difficult to understand. Surely Glasgow cannot be so poor in printers that one could not be found who could contrive to print the tables in the small octavo form. As the tables are now issued they are quite unmanageable for reference, and they cannot be preserved by those who may wish to keep them except by arrangements as cumbersome as objectionable. As the returns stand, their mode of publication is discreditable to a great corporation—the second in rank, if we mistake not, in the kingdom, if magnitude of a city is to govern the position of its municipality.

CARBOLIC ACID IN SMALL-POX.

SOME correspondence has recently appeared in our columns on the external use of carbolic acid in small-pox. On the 19th ult. we published a letter from Dr. Robert Bell, of Glasgow, in which he claims to have been the "*first* to suggest the employment of carbolic acid externally in small-pox," and refers to an article published in a contemporary, Nov. 25th, 1876, in which a case is quoted from as far back as December, 1871. A reference to the excellent "Medical Digest" by Dr. Richard Neale, published last year by the New Sydenham Society, shows that carbolic acid was used even before this date. In THE LANCET, vol. i. 1868, p. 151, a communication appeared from Dr. Horatio Yates, relating his experience with carbolic acid, and advocating its use. Other communications on the same subject were published from Dr. Watson (vol. ii. 1872, p. 42), Mr. R. G. Kellett (ibid., p. 175), and Dr. Daniel Mackintosh (ibid., p. 244).

HOSPITAL SUNDAY IN BIRMINGHAM.

THE annual collections in the various places of worship in Birmingham and the surrounding district in aid of the Queen's Hospital, which took place last Sunday, have, so far, produced the handsome sum of nearly £6000, and, as the whole receipts have not yet been paid in, the total amount will probably considerably exceed that sum. The wants of the Queen's Hospital at the present time are, however, both large and urgent, the debt being upwards of £8000, so that, with the munificent proceeds of Hospital Sunday, the institution will not be entirely free from debt. There should be no difficulty in raising sufficient funds in Birmingham to relieve the hospital from the incubus of debt, and we hope soon to hear that by public subscription the balance has been cleared off.

CHILDREN IN BRICKFIELDS.

GREAT difficulty is experienced in carrying out the provisions of the Act to regulate the employment of children in brickfields. In a case which was brought before the Uxbridge magistrates the other day, and in which they, very properly, declined to allow all the summonses except one to be withdrawn, as suggested by the inspector, it was stated by a witness that "when it was known that the inspector was coming, the children were 'popped' under some straw." It ought never to be *known* when an inspector is coming, and when that official enters a field he should take measures to prevent being deceived. It is to the loose and amiable way in which acts of this description are enforced we owe their failure. There is so much dread in the Legislature of "interfering with the liberty of the subject" that measures for the enforcement of sanitary and personal obligations bearing on the health and social prosperity of the people are seldom sufficiently exacting. When they come to be further toned down by the forbearance of administrators and the leniency of justices, they cease to be of any real value, and are chiefly regarded as vexatious.

SCARLET FEVER AT CAMBORNE.

WHILST the local sanitary authority and the Local Government Board are at variance about the best method of sewering this large mining town, scarlet fever is spreading in the district, and, on the urgent advice of Mr. Butlin, a large school at Troon has been closed until further notice. It was at first contemplated to leave the admission of children to the discretion of the schoolmaster, but a letter from Mr. Butlin clearly showed the inefficiency of any such puerile plan of procedure. As 120 children had been ill during the last five months, and 200 is the average attendance at the school, the School Board cannot be said to have acted too soon in taking the necessary means for arresting the wholesale diffusion of the disease.

RUSSIAN MEDICAL NEWS.

THE Russian medical men engaged in the war on the Danube and in Asia Minor have in contemplation the publication of a series of memoirs devoted to the pathological and surgical experiences of the war.

A meeting of representatives of Russian medical science was held in St. Petersburg on Oct. 6th for the purpose of making arrangements for a public reception of the St. Petersburg medical men who had returned from the seat of war. M. Rozow, director of the medical department of the Ministry of the Interior, took the chair, and a committee was formed to organise the reception.

The number of students who have entered the St. Petersburg Medico-Chirurgical Academy for the present session is reported to be unusually large. The entries for the first course of study amount to 500; about 100 of these students come from other universities. In the veterinary section of the Academy the entries are 100.

NAVY CLOTHING.

AS the *United Service Gazette* suggests in effect, it is a great pity that the Medical Director-General of the Navy has not sufficient influence at Whitehall to induce some change of uniform for the blue-jackets serving in tropical or semi-tropical latitudes. Some of the sickness among the crews of the ships off Cyprus must, doubtless, be attributed to that cause. The Prince of Wales, as our contemporary notes, suggested the desirability of helmets for the officers of the *Serapis* during his Indian cruise, and it would be well if, in this and other points, the advice of the Medical Department were listened to a little more by the executive at the Admiralty. We shall see what comes of the visit of the First Lord to Cyprus, if, as is rumoured, Afghanistan affairs do not stop the way.

INTELLIGENCE has been forwarded to us that "all the native troops from Cyprus have reached India with the exception of the Ghourkas. The 31st Bengal Infantry were in good condition, and the regiment has been sent from Cawnpore to the frontier. The 13th Bengal Infantry, however, which left India a splendid regiment, returned incapacitated with Cyprus fever. When they reached India there were 140 sick and there had been five deaths, all from Cyprus fever, on the voyage, a native officer dying the night

before the regiment reached Bombay. Almost all the men had suffered, and every European officer—two of the latter had to be invalided. There is much intermittent fever at Ferozepore, no less than 250 European troops being down with it. The 38th Bengal Infantry have lost no less than 100 men during the past hot weather from intermittent fever, one company having only two men left in it! This regiment is stationed at Barrackpore, and up-country natives cannot stand the Bengal climate; they die like rotten sheep. Thousands more sepoys can, however, be readily procured, so no notice is taken of the matter, and year by year regiments are sent down to suffer. Were the men Europeans there would be a terrible outcry at once, but they are only 'niggers.'"

BY the death of Sir R. Griffith, a vacancy has taken place in the Senate of the Queen's University in Ireland, for which there are two candidates, Dr. McKeown of Belfast, and Mr. Stoker, who is connected with the Medical School of the Royal College of Surgeons. It appears to be generally desired that the vacancy should be filled by a medical gentleman, and in some quarters the opinion prevails that the candidate chosen should not be connected with any rival School of Medicine. The *Belfast News Letter*, in reference to this subject, remarks that there seems to be a strong opinion abroad adverse to the appointment on the Senate of gentlemen in Dublin who hold official positions in other medical schools. This point is specially alluded to in the circular which has been issued by the secretaries of Dr. McKeown's committee, and it will no doubt raise the main issue on which the election will be decided.

RUSSIAN journals report that the mortality of St. Petersburg during the week ending Oct. 5th was the smallest which had been recorded for a like period for many years. The number of deaths from all causes registered in the capital during the week in question was 390, of which 179 were of children under four years of age; 26 of the deaths were caused by "typhus" (? enteric fever), and 26 also by small-pox, which is prevalent among young children. "Typhus" (? enteric fever) has also been prevalent in the city, but the disease has now lost its epidemic character.

WE are requested to state that besides the name added to our incidental mention of the Associate Fellows of the College of Physicians of Philadelphia by Dr. Barnes in his letter which appeared last week, the following should have been specified:—Dr. Butcher, of Dublin; Dr. Geo. Johnson and Mr. Joseph Lister, of London; and Dr. G. H. B. Macleod, of Glasgow.

THE Midland Medical Society, whose head-quarters are at Birmingham, held its inaugural meeting on October 30th, in the library of Queen's College, under the presidency of Mr. Herbert M. Morgan, of Lichfield, when Professor Lister, F.R.S., gave an admirable address "On the Healing of Wounds without Antiseptic Treatment.

THE certificates of efficiency will be presented to the members of the Volunteer Ambulance Department at Westminster Hall this evening (Nov. 1st), at 6 o'clock, by the President, Surgeon-General Munro, C.B., A.M.D.

THE latest news which has reached us from Cyprus, states: "Sickness decreasing, attacks milder in nature, the total number in hospital being 2 per cent. less than the previous week; no death since last report (a week ago)."

MR. SAMPSON GAMGEE has been elected a Fellow of the Academy of Medicine and Surgery of Rome.

Correspondence.

"Audi alteram partem."

DIRECT HEMIPLEGIA.

To the Editor of THE LANCET.

SIR,—Speaking of explanations given by Longet and others of the phenomenon of *direct* hemiplegia, I stated in THE LANCET of last week (p. 574), that a case had been seen in Liverpool in which there had been made an examination of the anterior pyramids, showing that the decussation was quite normal, so that the direct paralysis was not to be explained by a lack of the usual crossing. Since the publication of the last number of THE LANCET, I have received the "Liverpool and Manchester Medical and Surgical Reports," a publication edited by Dr. J. Wallace, in which I find that the case I alluded to had been seen, not by Dr. Wiglesworth, as I have said, but by Dr. Edward H. Dickinson, Lecturer on Comparative Anatomy at the Liverpool School of Medicine. The details of that case are most important, and leave no doubt that the paralysis, which was on the *left* side, was due to the only lesions found, which were numerous, and all on the *left* side of the brain, the right side being perfectly sound. For those persons who yet believe that the anterior pyramids are the channels through which the will acts on muscles, it is essential to say that in that case the decussation of the pyramids was ascertained to be quite normal, so that Longet's and Hilton's supposition had no application here. (See page 154 *et seq.* of the publication above quoted.)

Believe me, Sir, yours truly,

Rue François Premier, Paris. C. E. BROWN-SÉQUARD.

FOREIGN BODIES IN THE AIR-PASSAGES.

To the Editor of THE LANCET.

SIR,—Sharing as I do in Mr. Charles Hawkins's belief in the importance of history being truthful, I cannot refrain from the expression of my surprise and regret that his attention had not long since been drawn to the passage which I quoted from Sydney Smith's letter to Mr. Grote. The letter referred to will be found at p. 491 of the second volume of the third edition of "A Memoir of the Rev. Sydney Smith, by his daughter, Lady Holland, with a selection from his Letters edited by Mrs. Austin." This third edition was published by Messrs. Longman and Co. as long ago as 1855, therefore during the lifetime of Sir Benjamin Brodie; and the passage which I quoted in my lecture is doubtless impressed upon the memory of many thousands of non-professional as well as medical readers.

Although in his letter to you Mr. Hawkins does not express his thanks to me for having brought to his knowledge the existence of a widely published statement the accuracy of which he now impugns, I do not doubt that he feels that I have placed him under some obligation by thus affording him the opportunity of applying to the editor or the publishers of the Memoir with a view to prevent the reappearance of the fabulous narrative in any future edition of the work in question.

How it happened that so intelligent a man as Mr. Brunel came to entertain and to propagate the delusion that his medical attendants were, for a time, engaged in an ecstatic dance, is an interesting psychological problem which I will not attempt to solve.

I am, Sir, your obedient servant,

Savile-row, Oct. 18th, 1878. GEORGE JOHNSON.

THE CROUP AND DIPHTHERIA COMMITTEE OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

To the Editor of THE LANCET.

SIR,—On reading your very able report of the proceedings in reference to the above subject at the last meeting of the Medical and Chirurgical Society, I was somewhat astonished to find that, with the exception of a brief reply to a question put by one of the Fellows, the remarks I made on the

occasion are entirely omitted. As I am quite sure the omission was unintentional, I trust to your well-known courtesy to allow me very briefly to supply it; and I think you will allow that I have some claim to be heard when I state that the committee in question was appointed in consequence of a paper by myself, read on the 9th of November, 1875, at the Society.

At the recent meeting, then, I recalled the fact just noticed to the minds of the Fellows, and I stated, moreover, that the main conclusions arrived at in that paper were that the so-called "membranous croup" and what is now known as "laryngo-tracheal diphtheria" were one and the same disease. I also stated, and truly, that the conclusions so drawn were the results, not of hasty generalisation, but of long study and reflection and of such experience as lay within my reach, and that the far larger experience obtained by the operations of the committee, extended as they were over a very wide area, and associated as I was with a number of distinguished *collaborateurs*, had tended to strengthen my convictions and to lead, as I believe, to the most important practical results to medicine and surgery.

Of course it still remains to be proved whether I and the rest of the committee have rightly interpreted the multitude of facts and the great mass of evidence which we have collected, but I must be pardoned for believing that my remarks were neither irrelevant nor presumptuous, and for hoping that I may not be deemed egotistical in asking, as a matter of fairness, that the few words I spoke may be recorded.

I remain, Sir, your obedient servant,

R. H. SEMPLE, M.D., F.R.C.P.L.

Torrington-square, October, 1878.

CARBOLIC ACID IN SMALL-POX.

To the Editor of THE LANCET.

SIR,—It was not my intention again to join in the very interesting correspondence which has been going on in your columns for several weeks past on the above subject. Dr. Bell's letter in THE LANCET of October 19th seems to me, however, to require some little notice. In it he claims to have been the first to introduce this treatment, and refers to a paper of his in the *British Medical Journal* (which I have not seen) giving details of a case treated by him in Dec. 1871. I was appointed house-physician to the Hampstead Hospital in October, 1871, and when I entered on my duties I found the carbolic acid treatment in vogue there, in the forms of watery and oily solutions, the former 1 to 40 to 1 to 20, the latter 1 to 20 to 1 to 5. How long this treatment had been in operation before I went there I know not; who introduced it I cannot say, most probably the late superintendent, Dr. Robert Grieve, now of Berbice; but the fact remains that I found the treatment in operation months before the case mentioned by Dr. Bell.

I agree entirely with Dr. Lowe that the weaker applications, though useful in many ways, nay, almost indispensable, have failed to cause abortion of the rash or cut the disease short; and would, if I had again the opportunity, give the other method of treatment a fair trial—viz., the introduction of strong carbolic acid or nitric acid into the pustules. This somewhat heroic treatment would require to be carried out very cautiously, for if we consider the hundreds of pustules in a confluent or semi-confluent case, the amount of acid introduced, though very little in the individual pustules, in the aggregate would amount to the subcutaneous injection of a comparatively large quantity of acid. How far this would act on the constitution remains to be seen. The amount of labour it would involve on house-physicians would be a formidable objection to it, as it is an operation one would not wish to delegate to nurses. If successful it would mean trebling or quadrupling the number of house-physicians during a severe epidemic; still, that difficulty could be got over if happily we could find some means of checking the progress of the disease. Professor Gairdner, of Glasgow, advocated this same method of treatment to his students ten years ago, using, instead of carbolic acid, a solution of iodine. He confessed, however, that after careful experimentation, it proved a failure.

One word more. In all cases where trials of new methods of treatment are made in small-pox the unmodified unvaccinated small-pox should be experimented on. All vaccinated cases are perfectly worthless as test cases; for, as I mentioned in my last (and I was very happy to see my views corroborated by Dr. Kesteven), those who have seen much small-pox are perfectly aware that in vaccinated cases abortion of the rash may take place in any stage of the disease—does take place in a very large proportion of cases *without any active treatment whatever*. Such being the case, how can we lay claim to having caused it by our treatment? But let us see a series of unvaccinated cases of true small-pox, where abortion of the rash is produced in the same proportion of cases, and a very great stride will have been made in the treatment of this formidable disease. The importance of the subject is my apology for occupying so much of your space.

Yours, &c.,

Johnstone, Oct. 19th, 1878. M. H. TAYLOR, M.B.

To the Editor of THE LANCET.

SIR,—In your issue of Oct. 19th, Dr. Bell, of Glasgow, lays claim to having first suggested the use of carbolic acid in the treatment of small-pox. A reference to the "Medical Digest" would have saved this gentleman from making so grave an error, for there it will be found, Section 84–5, that in January, 1868, Dr. Yates, of Canada, wrote to THE LANCET (p. 151) giving details of a case where the good influence of this agent appeared so marked that Dr. Yates concludes his letter thus:—"My present opinion is that hereafter the mortality from small-pox may be diminished, and the disfigurement of God's image entirely abolished, by the use of carbolic acid."

Obediently yours,

RICHARD NEALE, M.D. Lond.

Boundary-road, St. John's-wood, Oct. 22nd, 1878.

PARIS.

THE official opening of the Paris Faculty is to take place on the 4th of November, when the first lectures will be delivered. There are no changes to be made in the teaching body, and the different chairs will be occupied by those professors whose names have been so long associated with them. Clinical teaching will also commence in the hospitals towards the beginning of November. The four chairs of Clinical Medicine will be occupied by Professors Potain, Hardy, Sée, and Lasègue as in former years. The Professors of Clinical Surgery are MM. Gosselin, Richet, Verneuil, and Broca, and the chair of Accouchement will be filled by Professor Depaul. In addition to these there will be delivered a series of clinical lectures upon special subjects by some of the vice-professors or "agrégés" of the Faculty. Dr. Fournier will lecture upon Syphilography at St. Louis Hospital, and Professor Guyon upon Diseases of the Urinary Organs at Necker Hospital. The chair of Mental Diseases will be occupied by Professor Ball at St. Antoine Hospital.

For many years past the Paris Faculty has opened its doors to ladies desirous of becoming members of the profession, and many of them have already availed themselves of the privilege which had been accorded to them, and have taken out their degree. The Assistance Publique has, however, refused up to the present moment to allow them to compete for dresserships, or for the post of *interne*. They were consequently unable to occupy any official position in the hospitals. This state of things does not seem to have been to their taste, and a petition has been sent in to the Director-General of the Administration, with a view of removing the difficulty. It is not, however, probable that the regulations will be altered.

At the annual competition for the post of *Interne des Hôpitaux*, the subject was, "Structure of the Kidney, and Diagnosis and Semeiological Significance of Albuminuria." The successful candidates are nominated for a period of four years, during which time they will fill the post of house-physician or house-surgeon in the different hospitals of the capital.

The Administration of the Assistance Publique has taken measures to isolate cases of small-pox, and certain wards situated in detached pavilions will be devoted to that use. This tardy measure will astonish English readers, as in London such an arrangement has been in existence for a

long time, while here, up to the present date, no such precaution has been taken. There is also a pavilion in the Children's Hospital of Ste. Eugénie which will be specially employed for the reception of cases of diphtheria. Similar arrangements will take place at the Maternity Hospital in M. Tarnier's service.

The Assistance Publique has endowed the capital with a new and large hospital, situated on the heights of Ménilmontant. This establishment—of which the readers of THE LANCET may have seen a detailed account in a recent number of the journal—is the second of the Hôtel Dieu description which has been opened to the public within the last two years. It will probably be ready for the reception of patients on the 15th of January next.

At a recent meeting of the Société de Chirurgie an important discussion took place upon the use of the thermocautery in the operation of tracheotomy. The ingenious instrument of Dr. Paquelin is held in great favour by the generality of French surgeons. M. de Saint Germain, who has had great experience in its use at the Children's Hospital, expressed himself thoroughly satisfied with it, and declared that by its employment the occurrence of that most dangerous accident during the course of tracheotomy—namely, the introduction of blood into the trachea—was avoided.

Another death has to be added to the long list of those due to diphtheria. An unfortunate young student of only twenty-one years of age contracted the disease from an infant which he was examining at St. Louis Hospital, and died within three days of the infection. Sad accidents of this nature are of much too frequent occurrence in Paris, and not a year passes without our having to deplore two or three of the kind.

At the meeting of the Société de Biologie, Dr. Brown-Séquard gave an interesting account of his experiments on transfusion. He had made use of different sorts of liquid for transfusion, such as normal blood, blood without its fibrine, and milk. In each case he found the results to be the same, but in the case of the milk the quantity that it was necessary to inject was more considerable than in the others. Ninety-five grammes of blood were drawn from a dog, and were replaced by the same amount of milk. Shortly after the operation (about forty-five minutes) there was no trace of milk globules to be found in the blood, and the dog has continued in excellent health ever since the operation, which took place more than five months ago. M. Malassez found, upon examining the blood after the transfusion, a greater number of white globules than normal. In concluding his remarks, Dr. Brown-Séquard expressed the opinion that the liquid injected should be at least of a temperature of 10° to 12° C. It was preferable, he thought, to choose the arteries rather than the veins, and recommended the operation to be done very slowly, in order to allow the liquid injection to acquire the temperature of the blood. Transfusion also succeeds in animals when the blood made use of comes from a species of animal different from that of the one under experiment. It appears that Dr. Thomas, of New York, has tried the transfusion of milk on the living subject, and is convinced that it acts as well as blood.

The sanitary condition of Paris at the present moment is satisfactory. The enormous increase of the population during the past few months, owing to the Exhibition, has in no measure altered the usual character of the health returns. The autumnal increase in the number of cases of typhoid has been much less marked this season than in past years, and the number of deaths from that disease, all things considered, is decidedly low.

YELLOW FEVER IN MADRID.

(From our Special Correspondent.)

THE outbreak of yellow fever in this town is far more serious than generally imagined. The inhabitants of Madrid are, as a whole, sublimely ignorant of the dangers with which they are menaced. The newspapers do not allude to the subject, and but for my good fortune in meeting the doctors who have been attending to the sick, I might have passed through the town without knowing what was occurring. As it is, I cannot positively state the precise number of deaths, for the Government, being principally responsible for the disaster, is now doing its best to hush up the whole affair. Nevertheless, we can confidently assert that the outbreak, which has now assumed the proportions of an epidemic, has caused within a month about eighty deaths! Nearly all the cases have proved fatal, and the result was so rapid that it was generally impossible to remove the patients to hospital. At the present moment there are only two cases within the wards, and these are being nursed in the Hôpital de la Princesse. The history of the epidemic is easily told, and the facts, on the whole, clearly traced. Some 17,000 or 18,000 soldiers have recently returned from Cuba. They landed, for the most part, at Santandar, and more than half the total number started at once by train for Madrid. It was only when this large body of troops reached the capital that they found time to unpack their trunks and give their linen out to wash. The soldiers, I should add, had been disbanded, and went into lodgings or furnished apartments, while the officers found a temporary home in some of the more fashionable hotels. Thus the epidemic has broken out in the very centre of the town, many cases occurring within a stone's throw of the Puerta del Sol! Some women who attended to the soldiers and washed their linen were among the first to contract the disease.

The Royal Commission of Health, a consultative body, created in accordance with the Spanish Sanitary Act of November the 28th, 1855, at once issued a series of recommendations, and submitted them to the Government. They suggested that though disembarkation without quarantine might be allowed from ships in which no illness had been noticed during the journey, still this should only be permitted in ports where there would be the least danger of an epidemic. On landing, it was urged that the troops should be immediately marched off to some elevated country district a good twenty miles away from town, where the soldiers might camp for a week, unpack, air, and clean their clothes, before they were allowed to mix with the community at large. The crews of the ships were to be confined to lazarettes, and their clothes purified. These very rational and moderate measures were not, however, carried out; but, as we have stated, the troops were allowed to proceed at once to Madrid, and there spread themselves about so as to give whatever germs they might bring over with them from Cuba every possible opportunity of fructifying.

It may be urged that all this could not be foreseen by a government notoriously ignorant and indifferent as to sanitary matters; but, at least, some effort might now be made to check the spread of the evil. With this view, the Royal Committee of Health have again submitted a series of recommendations. They urge that, wherever a case of yellow fever occurs, the linen which has come in contact with the patient should be kept apart and washed separately. Nothing of the sort has been done; but, even in hotels, the sheets on which men have died from the fever are mingled indiscriminately with the linen of the other lodgers. Last week in one house, where a Cuban soldier lodged, no less than five people fell victims to this carelessness. Some paltry attempts have been made to fumigate a few rooms; but these measures were not serious, and there is no knowing how far the epidemic may spread. I was assured by one of the most respected and able members of the Royal Council of Health that there is not a disinfecting stove or apparatus in all Madrid; and that, notwithstanding the most urgent efforts of the council to obtain the construction of a chamber where contaminated objects might be exposed to 120° of dry heat, the Government has refused to incur this trivial outlay. Even the present epidemic and the accompanying reiteration of these demands have not shaken the indifference and indolence of the authorities. Such conduct seems at once strange and discreditable in this advanced age of civilisation. The most simple and inexpensive precautions might have prevented an evil which is now so firmly implanted that there is no calculating how serious the epidemic may become. At present the Calle de Tetuan is the focus of infection, and the neighbourhood of the Puerta del Sol, the Piccadilly of Madrid, and the quarter most frequented by English visitors, has greatly suffered. In conclusion, I may be allowed to observe that about a hundred cases of yellow fever, with a mortality of 80 per cent., occurring in the course of one month, for the most part in the same district of

a capital which, at the highest computation, does not possess altogether a population of 400,000 inhabitants, represents a certain risk of life, which nervous tourists would do well to avoid.

ARCACHON AND BIARRITZ.

(From our Roving Correspondent.)

THE two health resorts which it is proposed to bring under the notice of the readers of THE LANCET in the present letter have this peculiarity in common—that they are equally frequented both in summer and winter. In summer the sea-bathing is the leading attraction at both of them, and the visitors are mainly supplied by the neighbouring sultry districts of France and Spain, while in winter the inhabitants of northern Europe—from Great Britain, Russia, and elsewhere—flock here to escape the rigours of their own latitudes, and enjoy the mild climate of the Bay of Biscay. Biarritz has had a reputation as a health-resort for many years, but Arcachon has only recently begun to attract the attention of the medical profession. On this account we hope that the subjoined details will be found at once interesting and useful.

Arcachon is a sea-bathing place which has risen rather suddenly into prominence. Twenty years ago it was an unpretending little village; now it is a large and thriving town, covering a very extensive area, and having a sea frontage rather more than four miles in length. Situated on the southern shore of a landlocked bay of more than 38,000 acres; nearly eight degrees of latitude south of London, and some forty miles south-west of Bordeaux, whence it is easily reached by rail; built upon a sandy dune of huge extent; within a few miles of the Bay of Biscay, whence come perennially refreshing breezes, and surrounded on all sides but one by a pine forest, Arcachon enjoys a climate which is in many respects unique. The large sheet of water to the north, fed by the Gulf Stream, ensures a tolerably equable temperature, warm in winter, and not too hot in summer. The prevailing winds from the sea bring with them an amount of rain which is a little in excess of the average, while the sandy nature of the soil ensures the rapid disappearance of every drop of moisture from the ground. If the rain were not abundant the cultivation of the soil would be impossible, and an arid desert would replace the verdant and blooming district of which Arcachon is the centre; for the soil is pure sand and nothing else, and this sand, it is said, extends to a depth of fifty metres below the surface of the ground. The surface is uneven, the sand having been originally blown into mounds and hillocks of moderate height; and this fact, while it adds immensely to the beauty of the country, encourages surface-drainage and permits of a very varied choice of building sites as regards aspect, &c. The prevailing tree is the pine, of which there are many fine examples, and one of the chief industries of the district is the collection of resin from these trees. Sub-tropical plants, such as the castor-oil plant, the orange, and the arbutus, blossom readily out of doors.

Accurate facts regarding the climate are difficult to obtain, and at present, it is to be regretted, no methodical meteorological observations are taken. In a *brochure* by Dr. G. Hameau, a physician practising in Arcachon, we find that for the six years 1854–60 the mean winter temperature at noon at Arcachon was rather more than 50° F., while at Bordeaux, during the same period, the mean temperature was 45° F. For the five years 1785–90, the mean winter temperature was stated by Guyot to be 43° F., and for the nine years 1822–30 Lamothe stated the mean temperature to be also 43°. In the winter (December, January, February) of 1864-65, which was a winter of exceptional severity, the midday temperature was, on eight occasions, below the freezing point, the lowest temperature registered being 26·5° F. During the same winter the highest temperature registered at Arcachon was 66° F. During the six years 1854–60, the thermometer was only upon six occasions below the freezing point, while in Bordeaux the freezing point was attained no less than eighteen times.

The absence of any high snow-clad mountains in its immediate neighbourhood seems to protect Arcachon from those extreme degrees of cold which are common in such places as Nice and Pau. The observations of Ottley, made in 1854–64, show that at Pau the temperature of 9° F. was once attained, and that frosts of moderate severity were far from uncommon. During the same period the maximum winter temperature was 67·5°.

The quantity of rain which falls at Arcachon is considerable, but there is this advantage, that it falls in large quantities at a time, and the showers are short rather than prolonged. It is the rain which gives the verdure and luxuriance to the district, and since it cannot possibly lie for many minutes upon a soil the permeability of which is perfect, it seldom prevents the invalid from taking his daily exercise in the fresh air. During the three months included in the winter of 1864–5, rain fell upon twenty-five days, while upon forty-one days the sky was clear and cloudless.

The prevailing winds come from the south and west, and, with the exception of the east wind, they are none of them notoriously unpleasant. Arcachon can claim as an advantage that it is not open to the scourge of the mistral which so frequently sweeps over the towns of the Riviera.

As for ozone, not much is known. Iodised paper is soon turned blue in a forest of pine, and the blue colour of the "ozone papers" at Arcachon is deeper and more quickly produced than at many other places.

The climate of Arcachon is double—i.e., there is a forest climate and a sea-shore climate; the former having a temperature which, on an average, is three degrees higher than the latter. Thus the town is divided into a *ville d'été* and a *ville d'hiver*, and the natives enjoy the great commercial advantage of both a summer and a winter season. In the summer Arcachon is the great resort for the wealthy inhabitants of Bordeaux, who flock there in thousands to enjoy the sea-bathing and the cool breezes. During the summer months the houses on the beach are alone habitable, and visitors should be careful to obtain a room facing the north, and absolutely upon the sea-shore. This is not very difficult, in spite of the large demand, by reason of the great extent of the sea-front (nearly four miles). There is no stately and stiff promenade as in English watering-places, but the gardens of the houses and hotels run completely down to the sand, so that the visitors have a ready access to the shore. This allows of a very enjoyable and unceremonious toilet. Naked feet are very commonly observed, even amongst the better class of ladies; and it is no uncommon thing to find a bather taking a short promenade with nothing but his bathing-dress upon him. The sandy bottom and the entire absence of stormy seas render the bathing enjoyable and safe; and ladies and gentlemen may be seen bathing together, romping, laughing, and throwing off the trammels of society as completely as possible.

In the winter the town of Arcachon is largely frequented by *poitrinaires*, and of late years many English have here sought relief for chest complaints of various kinds. During the winter season the beach is forsaken, and the recesses of the forest are solely in demand. The forest is, to a great extent, in the hands of a limited company. Boulevards and roads are being cut through it in every direction, and châlets and villas are springing up as fast as masons and carpenters can do the work. The châlets and villas are all isolated; each stands upon its own plot of ground, surrounded by a little garden and protective pine trees, and most of them are remarkably picturesque. Indian bungalows, Swiss châlets, English cottages, even Chinese pagodas, and, be it added, cockney villas, meet the eye at every turn, and a walk through the forest of Arcachon is like visiting an exhibition of rural architecture. The Grand Hotel offers a solitary exception to the rural character of the architecture, and while all around it affords the sweet deception of a forest life and Arcadian simplicity, it rears its ugly mass of utilitarian brickwork, spoiling the appearance of Arcachon from the sea, and, by intercepting the horizon, spoiling the views of the sea which are to be got from the high grounds behind the town.

For those who cannot find enjoyment in absolute repose, sylvan beauty, and fresh air, Arcachon may seem a dull place. There is a casino, built in the Moorish style, charmingly perched upon a commanding elevation, where music, theatricals, and newspapers are to be found, and this forms the sum total of the artificial excitements of Arcachon. There is bathing in perfection. There are excellent roads

for walking, and serviceable carriages, horses, and ponies for those who prefer riding or driving. The most interesting excursions for visitors are to the Oyster Parks in the basin, or to the Lighthouse at Cape Ferret. The dwellers round the Arcachon basin are almost all of them occupied in the business of oyster culture, for which the situation is admirably adapted. It is said that upwards of one hundred millions of oysters are raised here annually, the money value of which, at the wholesale price, is about £200,000. The parks may be visited at low water, and the oyster, if the visitor be so inclined, may be lifted from his bed and swallowed directly. At night, when the tide is falling, the oyster-boats may be seen making for the parks, each bearing a powerful light in the bow to guide the oystermen in their work, and few prettier sights than this can be seen. At Cape Ferret, on the shores of the Bay of Biscay, the visitor may see what Arcachon was before the French Government undertook the reclamation and cultivation of the dunes. Here is a veritable seaside Sahara—sand, and only sand, into which the pedestrian sinks ankle deep, and which is whirled in eddies by the wind, and washed in all directions by the waves. Upon this waste of sand the Bay of Biscay beats with a force which is as furious as it is unceasing, and the roar of the rollers breaking on the sandy beach is audible for many miles. The erection of a huge double dyke, and the judicious planting and manuring of the dunes behind it, seem, however, to have imposed a limit upon the encroachments of the mighty sea.

No greater contrast can well be imagined than that which exists between Arcachon and Biarritz. Biarritz is one of those places which the late Emperor of the French made fashionable, and it was not until royalty put its stamp upon it that the world awoke to the beauty of the situation, and its advantages as a climatic resort. The town of Biarritz, an unpretending old-world place, with narrow tortuous streets, stands upon a promontory jutting into the Bay of Biscay, and on either side of this promontory is a bay, the one looking to the north-west, and the other to the south-west. The rock of which this promontory is formed is composed of a rich red sandstone, and many detached pieces of it, broken and caverned by the restless sea, show above the water, and surround the main rock, like outworks round a citadel. The promontory is covered with huge hotels and a casino, all of them square, rectangular, and staring red and white. Nestling immediately beneath the promontory we have on the south side Le Vieux Port, now converted into a bathing place, and on the north side the harbour for the fishing boats, a weird irregular jumble of breakwaters and rocks, which afford a scarcely sufficient protection against the occasional fury of the storms. Beyond these we have to the north the Plage de l'Impératrice, a semicircular beach, upon the far end of which is seen the Villa Eugénie, a square red-brick and uninteresting building, with no pretence to beauty of any kind. While to the south, beyond the Vieux Port, extends the Côte des Basques, behind which rise the picturesque peaks of the Pyrenées. There are three principal bathing-places at Biarritz—one on the Plage de l'Impératrice, a second in the Vieux Port, and a third on the Côte des Basques; and since the aspect of each of these places is different, it is generally possible to bathe at one or the other of them. The Vieux Port is a square-ended, narrow creek, and into the extremity of it has been fitted a three-sided wooden building open to the sea, in which bathers undress and assume the striped merino "costume de bain" which is *de rigueur* here. When the tide is rising, and the wind is blowing, even gently, into the creek, the waves which break upon the sands in front of the bathing-house have a size and force which must be seen to be appreciated. At such times there is no greater fun than to watch the bathing, and for the accommodation of spectators the Vieux Port has been surrounded with tiers of wooden seats, which are generally crowded; for watching the bathing and bathing *en evidence* are two of the chief amusements of Biarritz. It not unfrequently happens that an in-coming wave will knock ten or a dozen bathers of both sexes into a conglomerate mass, which is hidden for a moment, and then reappears all arms and legs, all dank and dripping, gurgling, yelling, and struggling to be free. The laughter with which the onlookers receive a *contretemps* of this kind may well be imagined.

In the summer Biarritz is chiefly frequented by Spaniards and French, who come for the cool sea breezes and the bathing. There is a casino, well supplied with literature and amusements, where at nights there is no little card-playing for high stakes; there is abundance of good music, a theatre, and every facility for riding and driving. There is naturally no boating or yachting in such a stormy sea, and it will be seen from what we have said that bathing is often to be attempted only by the strong and vigorous. The winter season, the season of the English, begins in October and ends in May. The advantages of Biarritz as a winter station lie in the fact that the rainfall is slight and the protection against the east winds complete. Situated on a cliff facing the west, it is warmed by the last rays of the winter sun, and the configuration of the ground and the nature of the soil ensure the rapid disappearance of moisture from the surface. When the north wind blows at Biarritz it is cold, and snow will sometimes fall, but the prevailing winds in winter are the sea breezes from the west and north-west. The climate is as exciting as that of Arcachon is calming. At the latter place invalids of a nervous temperament do well, but Biarritz is suitable rather for persons of a lethargic constitution.

GLASGOW.

(From our own Correspondent.)

THE winter medical session of our schools commenced to-day. Professor McKendrick gave the introductory at the University, Professor McVail at Anderson's College, and Dr. Macewen at the Royal Infirmary. Dr. McKendrick, in the course of an able address, spoke of the importance of experimental physics in the training of young students, and hoped that a course would be instituted during the summer on this subject. He further stated that the number of students last year was 500, being an increase of 50 per cent. during the past seven years, and that there was a sum of £425 available for fifteen medical bursaries.

At Anderson's College, Professor McVail gave an interesting historical account of its early founder and eminent teachers in the past, and asked the students to imitate those who had gone before them. Mr. George Anderson, M.P., and Mr. Holms, M.P., who were among the auditors, advocated encouragement to science in all its branches, and hoped that more technical chairs would yet be established in a College which had fostered Ure, Graham, Playfair, and Young. They also alluded to the growing importance of medicine in the legislation of the future in preserving health and healthy homes.

The gloom pervading the city from the recent gigantic failure seems to have penetrated university, college, and school, and it is anticipated that there will be a falling off in the attendance of students this year. It is to be trusted this will not be the case, but that the succeeding weeks will bring more men forward. There is a very strong feeling in the whole community, not least marked among the members of our profession, that a hearty effort must be made to wipe away the stain that attaches to Scotch commercial honour by a liberal response to a proposed scheme for the benefit of the unfortunate shareholders, many of whom were justly esteemed medical men.

Glasgow, October 29th, 1878.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examination, received the diploma in Dental Surgery at a meeting of the Board of Examiners on Tuesday last:—

Betts, Edward George, Holloway.
Harding, Burton Llewellyn, Olbury.
Hayman, Charles Augustine, Bristol.
Jones, Allan Frederick, Argyle-square.
Ridge, Walter Henry, Kensington-road.
Whatford, Frederick Russell, Brighton.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Oct. 24th:—

Anderson, Joseph Wm. Townsend, Belgrave-road.
Bridges, Ashley Colston, Worcester.
Brown, Percy, Lower Clapton.
Cameron, John, Bilston, Staffordshire.
Jackman, William Thomas, Stoke Newington-road

The following gentlemen on the same day passed the Primary Professional Examination :—

Wm. Lascelles Batson, St. Bartholomew's Hospital ; Francis Ferratus Glanville, St. George's Hospital.

THE death is reported of Dr. Patrick Heas, of Clonakilty, County Cork, after a few days' illness.

THE Wolverhampton Guardians have increased the salary of Mr. John T. Hartill, medical officer for the Willenhall District, from £90 to £120 per annum.

THE Denbighshire Justices have granted a superannuation allowance of £48 11*s.* per annum to Mr. Thomas Jones, who was medical officer to the County Gaol for the long period of thirty-five years.

SMALL-POX IN IRELAND.—Five deaths took place in Dublin last week from small-pox, being four less than in the preceding week. In Belfast the epidemic has quite disappeared; but in Galway it is still rather prevalent, and six deaths were recorded from it during the past week.

AT the Breconshire Quarter Sessions, held at Brecon, on Tuesday, the 19th ult., James E. Peirce, Esq., M.R.C.S. and L.S.A., Littleworth House, Redditch, took the oath and qualified as a magistrate for the county of Brecon. Dr. George Hornidge Porter, surgeon to the Queen in Ireland, has been placed on the Commission of the Peace for the County Wexford.

THE deaths registered in London last week numbered 1446, and included 4 from small-pox, 18 from measles, 46 from scarlet fever, 12 from diphtheria, 33 from whooping-cough, 30 from different forms of fever, 30 from diarrhœa, and 347 from diseases of the respiratory organs. The fatalities under the last-mentioned head exceeded the corrected weekly average by 46. Different forms of violence caused 63 deaths.

THE annual rate of mortality, according to the most recent weekly returns, in Calcutta was 33, Bombay 36, Madras 57; Paris 20; Geneva 23; Brussels 22; Amsterdam 22, Rotterdam 26, The Hague 28; Copenhagen 17; Stockholm 17; Christiania 18; St. Petersburg 33; Berlin 30, Hamburg 26, Dresden 23, Breslau 28, Munich 31; Vienna 23, Buda-Pesth 40; Rome 20, Naples 22, Turin 27, Venice 26; Alexandria 50; New York 24, Brooklyn 21, Philadelphia 15, and Baltimore 18.

THE LATE MR. G. W. W. FIRTH, F.R.C.S. Eng.—At the quarterly meeting of the governors of the Norfolk and Norwich Hospital, the following resolutions were passed unanimously, *sub silentio* :—"The board of governors desire to record their high appreciation of the character and services of the late G. W. W. Firth, Esq., senior surgeon to this hospital, who, for a period of thirty years, discharged the duties of his office with extraordinary ability and zeal, exhibited at all times a warm interest in the prosperity of the institution and the utmost consideration for the patients entrusted to his care. That the above resolution be signed by the Chairman, and forwarded to the bereaved family as an assurance of the sympathy and condolence of the board."

BOOKS ETC. RECEIVED.

E. R. Lankester : The Relation of Universities to Medicine.
Nouveau Dictionnaire de Médecine et de la Chirurgie Pratiques.
F. Mason on the Surgery of the Face.
Dr. Milne on Principles and Practice of Midwifery.
Dr. R. Martin. Latham's Works. Vol. II.
Dr. P. Gowan on Consumption.
H. M. Jones : An Atlas of Diseases of the Membrana Tympani.
Social Notes. Vol. I.
Smith's Visiting List.
Dr. M. H. Eichhorst : Die tropischen Beziehungen der Nervi Vagi zum Herzmuskel.
Dr. A. Doyon : Annales de Dermatologie Syphilographie.
Cassell's Magazine of Art. Part VII.
The Sunday at Home. November.
The Leisure Hour. November.
The Sunday Magazine. November.
Good Words. November.

Medical Appointments.

ABERCROMBIE, J., M.B., M.R.C.P.I., has been appointed Medical Registrar to the Hospital for Sick Children, Great Ormond-street, vice Garlick, whose appointment has expired.

ADAMS, M. A., F.R.C.S.E., L.S.A.L., has been reappointed Analyst for the County of Kent, and his salary increased to £125 per annum.

BELL, R. F., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Barrow District of the Barrow-on-Soar Union, and Medical Officer of Health for the Barrow Sub-district of the Barrow-on-Soar Rural Sanitary District, vice Downey, deceased.

BIRTWHISTLE, W., M.R.C.S.E., L.S.A.L., has been appointed Certifying Factory Surgeon for Skipton, vice McNab, resigned.

BURN, S. S., B.A., M.R.C.S., has been appointed a House-Surgeon to St. Bartholomew's Hospital, vice Schofield.

CLARK, C. D., L.R.C.P., M.R.C.S., has been appointed Midwifery Assistant to St. Bartholomew's Hospital, vice Burn.

CLARKE, W. B., M.D., M.R.C.S., has been appointed a House-Surgeon to St. Bartholomew's Hospital, vice Cripps.

COATES, C., F.R.C.P.Ed., F.R.C.P.L., has been appointed Physician to the Bath Friendly Society, vice Watson, deceased.

DAVIES, D. A., M.B., M.R.C.S.E., has been appointed a Medical Officer to the Swansea Provident Dispensary.

DINGLEY, A., M.R.C.S., L.S.A., has been appointed a House-Surgeon to St. Bartholomew's Hospital, vice Prosser.

DUNLOP, J., M.B., has been appointed Resident Medical Assistant to the Western Infirmary, Glasgow, for six months.

FLOOD, F., M.R.C.S., has been appointed a Resident Medical Officer to the Leeds Public Dispensary, vice Lee, resigned.

FOLKES, F. H., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been appointed a District Surgeon to the Salford and Pendleton Royal Hospital and Dispensary, vice Ross, resigned.

FRY, J. F., L.R.C.P.L., M.R.C.S.E., has been appointed a Medical Officer to the Swansea Provident Dispensary.

GEE, S. J., M.D., F.R.C.P.L., has been appointed a Physician to St. Bartholomew's Hospital, vice Black, resigned.

GRIFFITH, W. S. A., M.R.C.S., has been appointed Ophthalmic House-Surgeon to St. Bartholomew's Hospital, vice Clarke.

HEMMING, W. D., M.R.C.S.E., has been appointed a Surgeon to the Notting-hill Provident Dispensary and Maternity.

HINCKS, T. S. H., M.B., C.M., has been appointed Certifying Factory Surgeon for Hay, Brecknockshire.

HOOG, A., M.B., has been appointed Resident Surgical Assistant to the Western Infirmary, Glasgow, for six months.

HUGHES, W. H., M.R.C.S. & L.S.A.L., has been appointed Certifying Surgeon under the Factories Act for the Districts of Ashton-under-Lyne and Dukinfield, Lancashire. Also Honorary Surgeon to the Ashton-under-Lyne and District Infirmary.

HUNTER, R. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the No. 6 District of the Brentford Union, vice Davies, resigned.

JACKSON, R. A., L.R.C.P.L., M.R.C.S.E., L.S.A.L., has been appointed a Surgeon to the Notting-hill Provident Dispensary and Maternity.

JONES, V. Ll. W., L.R.C.P.L., M.R.C.S.E., has been appointed Certifying Factory Surgeon for St. Clears, Carmarthenshire, vice Thomas, deceased.

KENYON, J. K., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Teignmouth District of the Newton Abbot Union, vice Rawlings, resigned.

KINK, Dr. R., has been appointed Out-door Physician-Accoucheur for the Partick District, Western Infirmary, Glasgow.

LATIMER, H. A., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Swansea Provident Dispensary.

LEIGH, W. W., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Llanfabon District of the Pontypridd Union, vice J. Leigh, F.R.C.S.E., resigned.

MCCRACKEN, J., M.B., has been reappointed Resident Medical Assistant to the Western Infirmary, Glasgow, for six months.

MCDOWELL, C. W., M.D., F.R.C.S.I., has been appointed Consulting Medical Officer of Health for the Carlow Urban Sanitary District, vice F. V. McDowell, L.R.C.S.I., resigned.

MCMURRICH, M., M.A., M.B., has been reappointed Resident Medical Assistant to the Western Infirmary, Glasgow, for six months.

MOLONY, J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Collooney Dispensary District of the Sligo Union, and Medical Attendant to the Royal Irish Constabulary, Collooney, vice Moore, resigned.

MORTON, J., M.B., has been appointed Resident Surgical Assistant to the Western Infirmary, Glasgow, for six months.

O'BRIEN, D., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer of Health for the Lyme Regis Sub-district of the Axminster Rural Sanitary District, at £25 per annum, vice Wollaston, deceased.

PRICE, C. R., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Worcester Amalgamated Friendly Societies' Medical Association, at £170 per annum and Midwifery and Vaccination Fees, and £35 per annum for cab-hire, vice Edwards, resigned.

REED, W. C., M.B., C.M., has been appointed House-Surgeon to the North-Eastern Hospital for Children, Hackney-road, vice Buckingham, resigned.

REID, Dr. W. L., has been appointed Physician-Accoucheur for the Anderston District, Western Infirmary, Glasgow.

SEAGRAVE, C., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Resident Assistant Medical Officer to the Bolton Union Workhouse, vice Latour, resigned.

SHORT, W. H., L.R.C.P.Ed., L.F.P.S.G., L.S.A.L., has been appointed Medical Officer of Health for the Stow Rural Sanitary District, Suffolk, at £80 for one year, vice the Poor-law District Medical Officers.

VALENTINE, E. W., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the No. 2a District of the Langport Union, Somersetshire, vice Edkins, resigned.

WALMSLEY, F. H., M.D., has been appointed Certifying Factory Surgeon for Higher Broughton, vice Albury, deceased.

Births, Marriages, and Deaths.

BIRTHS.

APPLEYARD.—On the 14th August, at Longford, Tasmania, the wife of James Appleyard, M.R.C.S.E. & L.S.A.L., of a son.

CRESSWELL.—On the 26th ult., at East Moulsey, the wife of Richard Cresswell, M.R.C.S.E., of a son.

FINNY.—On the 22nd ult., at Lower Baggot-street, Dublin, the wife of John Magee Finny, M.D., of a daughter.

KISBY.—On the 18th ult., at Ballyfarnon, co. Roscommon, the wife of William J. Kisby, L.F.P.S.G., of a son.

MACDONALD.—On the 21st ult., at Gowan-park, Cupar, Fifeshire, the wife of Keith Norman MacDonald, M.D., of a daughter.

NICHOLLS.—On the 1st ult., at Dominica, West Indies, the wife of H. A. Alford Nicholls, M.D., of a son.

MARRIAGES.

BANHAM—BROWN.—On the 24th ult., at St. Martin's Church, Scarborough, by the Rev. W. Banham, B.A., Vicar of Worsborough Dale, Yorkshire (brother of the bridegroom), assisted by the Rev. R. Hemming Parr, M.A., Vicar, H. French Banham, M.A., M.B., of Sheffield, to Edith Maria, only daughter of the late J. Bower Brown, Esq., J.P., of Woodthorpe Hall, near Sheffield.

JEFFS—WOLLASTON.—On the 24th ult., at St. Michael's Church, Lyme Regis, Dorset, by the Rev. W. F. Downing, Thomas Busby Jeffs, L.S.A., St. Bartholomew's Hospital, London, only surviving son of the late Robert Jeffs, Surgeon, of Finsbury-square, to Mary Ann, eldest daughter of the late Richard Gulston Wollaston, L.R.C.P., M.R.C.S., L.S.A., of Lyme Regis.

NORTHMORE-WHITLOCK — PAYNE.—On the 24th ult., at Birdbrook, Essex, by the Rector, the Rev. J. Sedgwick, D.D., assisted by the Rev. A. Gardiner, Rector of Wixoe, J. Eden Northmore-Whitlock, Surgeon, of The Limes, Linton, Cambs., to Eva, daughter of Henry Payne, Esq., of The Moat, Birdbrook. No cards.

DEATHS.

COUTTS.—On the 25th ult., at Globe-street, Wapping, James Coutts, A.M., M.D., M.R.C.S.E., aged 64.

FLINT.—On the 25th ult., at Canterbury, Edward Flint, M.D., aged 30.

KENNEDY.—On the 24th ult., at Eldon-square, Newcastle-on-Tyne, John Ferguson Kennedy, L.R.C.P.Ed., aged 70.

LINGEN.—On the 28th ult., at Hereford, Charles Lingen, M.D., aged 67.

THOMPSON.—On the 27th ult., at Bognor, William Wittman Thompson, M.R.C.S.E., aged 43.

WOOLLTORTON.—On the 19th ult., at Mutford-bridge, near Lowestoft, John Woolltorton, M.R.C.S.E., aged 82.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

FEES FOR MEDICAL EVIDENCE.

M.D., M.R.C.S. — The magistrates should have paid for travelling expenses a sum not exceeding threepence per mile and one guinea for evidence. Our correspondent, living in a distant part of the United Kingdom, will be entitled to the tender of fees when subpœnaed. Glenn thus states the matter:—"In criminal cases no tender of fees is necessary, except in the case of witnesses living in one distant part of the United Kingdom being required to attend subpœnas directing their attendance in another, who are not liable to punishment for disobedience of the process unless at the time of service a reasonable and sufficient sum of money to defray their expenses in coming, attending, and returning have been tendered to them." We are afraid Welsh courts of justice are not much more unjust in respect of their treatment of medical witnesses than others. In the superior courts a medical witness, if resident at a distance from the place of trial, is entitled to two or three guineas a day, inclusive of all but travelling expenses.

OBSTETRIC QUERY.

To the Editor of THE LANCET.

SIR,—In Mr. Francis Newman's paper in the *Contemporary Review* for this month I read the following:—"The danger of childbirth is nothing to a North American Indian woman; its suffering not such as to weaken her for so much as a day. The pain, *inevitable*, is probably not more than conduces to maternal affection; also wise treatment by the bath, such as has long been customary on the shores of the Mediterranean, is credibly attested to reduce both pain and danger to a very low grade. In short, it is our *bad habits* which chiefly cause the misery, just as in the case of the domestic cow, which we ignorantly mismanage."

Will some one, more wise than myself, inform me whether it is a fact attested by observation that amongst uncivilised nations the pains of childbirth are reduced to *nil*; also, whether the custom of using a warm bath during labour prevails in the South of Europe.

We read in a very old volume that "in pain shalt thou bring forth children," and it is hardly a popular notion with us that our bad habits conduce to the misery of child-bearing.

I am, Sir, yours obediently,

Tottenham, Oct. 25th, 1878. W. H. PLAISTER.

W. F., (Chatham.)—Yes; the infant mortality in Rome is enormous, but not on account of the prevalence of disease. Coincidently with the large celibate population of both sexes, the number of foundlings is exceptionally great, and it is these much-neglected unfortunates that swell the infantile death-rate. In the trial last week (Don Paolo Borghese *v.* the *Capitale* newspaper) it came out in evidence that of these foundlings 92 per cent. die every year!

Mr. W. Taylor.—We do not prescribe. Consult a medical practitioner.

SMALL-POX AND VACCINATION.

To the Editor of THE LANCET.

SIR,—In your columns of the 26th inst., pp. 589-90, is an article which appears to have reference to my letter to the *Bath Journal* of the 8th October; and in it I read that "whereas in the seven years 1848-54 no less than *43 per cent.* of the deaths from small-pox were of children aged between one and five years, the proportion of such deaths in the seven years 1871-77 did not exceed 17 per cent., we cannot hesitate to attribute these results to vaccination." A letter replying to mine, signed by N. A. Humphreys, appeared in the *Bath Journal* the same date as the quotation I have given above. In this Mr. Humphreys says: "It is a fact that whereas in the seven years 1848-54 *no less than 68·4 per cent.* of the fatal cases of small-pox occurred among children under five years of age, the proportion declined steadily year by year till, in 1876, the last year for which the facts are available, it did not exceed 25·4 per cent."

There is a striking similarity of argument here, is there not? but a much more striking dissimilarity as to facts; and what makes it the more extraordinary is that the Registrar-General has not given us the means of declaring either the one or the other.

May I ask for your authority for the "43 per cent." I do not myself know that any means of ascertaining it exists, and shall be obliged for the information if I am wrong.

Further, as to the "17 per cent. 1871 to 1877." Is it also reliable? I have taken out from the Registrar-General's Weekly Returns the figures for 1877 and 1878 up to last week, and I find that 27 per cent. of the London small-pox deaths for 1877 were under five, and 29 per cent of 1878 were under five years of age. In neither case do you appear to me to be correct.

My aim is to be as exact as I am able to be, and I should be glad of the authority for this last statement also. It would be strange if, with all their influence, and the means of access to authorities at their command, medical men, who are so loud in their declarations of our ignorance, should be wrong themselves. Yours truly,

Darlington, Oct. 28th, 1878. ALEX. WHEELER.

*** We acknowledge the dissimilarity, but fail to see any discrepancy between the statements that *43 per cent.* of the deaths from small-pox in England and Wales during the seven years 1848-54 were of children aged between *one and five years*, and that *68·4 per cent.* of the deaths from small-pox during the same period occurred among children *under five years of age*. We have, however, the best grounds for believing that both statements are absolutely correct, and "what makes it the more extraordinary is" that all the facts upon which our statement was based are derived from the twenty-nine published Annual Reports of the Registrar-General relating to the years 1848-76. These reports will also enable Mr. Wheeler to check our statement, should he be so disposed, that the proportion of deaths from small-pox occurring in England and Wales, during the seven most recent years, among children aged *between one and five years*, has declined to 17 per cent.—ED. L.

MEDICAL ADVERTISING IN SCOTLAND.

TO do Scotland justice, we must say that *few* complaints reach us as to medical men in the north. The following card is sent to us as an exception to prove a rule. It was handed in to a house by a boy "out of livery":—

"Consulting hours, 2 P.M. and 6 P.M. Dr. John Taylor, Surgeon. Visiting fee, 2s.; confinement, £1 1s.—82, Albert-street, Leith-walk."

Dr. Taylor needs to be reminded that this way of bringing himself before the public is neither professional nor likely to succeed. The College whose diploma he possesses should give him a reminder of this sort.

"DEATH FROM CHLOROFORM."

To the Editor of THE LANCET.

SIR,—The case of death from chloroform reported by Mr. A. H. Laver, house-surgeon to the Sheffield Infirmary, is interesting and instructive. It shows that an abnormal condition of the heart may exist which cannot be detected by the stethoscope. It also shows, what I think is too fashionable in the administration of chloroform, that attention is concentrated on the organs of circulation, and not respiration, which is the best guide. If the breathing receive attention, any grave obstruction will be observed, and that golden remedy, pulling out the tongue, if promptly resorted to, will avert further mischief, and secure the safety of the patient. If I were about to be placed under the influence of chloroform, I would say, "Never mind my pulse, never mind my heart; leave my pupil to itself; keep your eye on my breathing, and, if it becomes embarrassed to a grave extent, take an artery forceps, and pull my tongue well out." It was the observance of this simple yet all-important rule that enabled the late Mr. Syme to say that he never lost a single case from chloroform, although he gave it in five thousand cases. Professor Lister has done much to enforce this rule of practice, and to him is due the credit of pointing out the *modus operandi* of this proceeding. He was the first, as far as I am aware, who explained that its action is not mechanical, but is exerted chiefly through the nervous system.

Yours obediently,

T. HUGHES, M.D.

Dinorwic Quarries Hospital, Llanberis, Oct. 21st, 1878.

Mr. Anderson.—Consult Wilson's Handbook of Hygiene. A closet built in the house, and discharging into a well-made and well-ventilated cesspool at the end of the garden, *and at a lower level than the house*, will meet the difficulty. Cesspools are not necessarily dangerous or even objectionable, and their contents are most valuable for garden manure; but they should be well built and liberally ventilated. (See Model Bye-laws issued by the Local Government Board with respect to the drainage of buildings, secs. 87 *et seq.*

Dr. Fletcher Beach.—The paper will be inserted at the earliest opportunity.

W. O. will find an answer to his question in last week's LANCET.

ARMY MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—You have always kindly opened your columns for the ventilation of the affairs of the Army Medical Department, and I would now, for the first time, request space for a few remarks, which I trust may be of some use at the present crisis.

During the time (twenty-four years) that I have served in the department I regret to say that discontent of a more or less marked character has prevailed, with the exception of a short period immediately after the promulgation of what will always be remembered as Sidney Herbert's Warrant—a Warrant which gave such complete satisfaction to the profession both in and out of the service that the ablest young surgeons competed eagerly at the entrance examinations, and none but the most highly qualified had a chance of gaining admission to the department. This happy epoch was, however, as brief as it was bright; and the reasonable and conciliatory provisions of the Warrant having been curtailed, nullified, or withdrawn, the tocsin of distrust was sounded through the schools; the professors considered it their duty to warn the students, and the latter soon began to look askance at that service, to qualify for which they had so zealously studied. To remove these evils, and to attract to the department men worthy of the trust, Warrant after Warrant was issued, but all in vain; the department continued to fall lower and lower in the estimation of the profession until it reached its present state of almost complete deadlock.

This very concise history of the department during the last quarter of a century should, I think, if read aright, not only reveal the cause of, but suggest a remedy for, its present unsatisfactory condition. At the first glance the question naturally arises, Why did the Sidney Herbert Warrant prove so acceptable, and all subsequent Warrants, which granted increase of pay, and were ostensibly drawn up with the view of ameliorating the condition of the officers of the department, so utterly abortive? The answer is a simple one, and contains the gist of the entire matter. The former Warrant accurately defined and established the proper position of the medical officers, and it did so by conceding to them that real military (*not relative*) rank by which alone the social status of officers is gauged not only in, but out of the service; and as these concessions were withdrawn, the discontent which they had allayed again rose, and has continued to the present time, because all subsequent Warrants have ignored them as unnecessary.

So much for the cause. Now for the remedy. Medical officers do not seek military rank for the purpose of exercising powers of command; but they feel that without it their duties are difficult, their position anomalous and undefined, and their social status lower than it should be. It must also be remembered that, although the medical officer is a non-combatant, he is in constant close communication with the soldier, and shares with him not only the dangers of the hospital, but those of the battle-field, and thereby establishes a claim to military rank.

In seeking a precedent to guide us in this matter, our thoughts naturally turn to the sister scientific corps, the Royal Engineers, the officers of which are endowed with military rank, without detriment to their more combatant brethren, and with benefit to the service. I would, therefore, unhesitatingly recommend, as a panacea for most of the ills to which the department has wellnigh succumbed, that it be assimilated to the corps of Royal Engineers. Let it be called the corps of Royal Surgeons; let the titles of the officers be lieutenant, captain, major, and so on of the Royal Surgeons, and let all such concessions be honestly recognised in spirit as in letter.

The majority of the recommendations of the late Committee are very good, much needed, and for some ranks not illiberal; but I firmly believe that no Warrant that leaves unsettled the much-vexed question of rank will be well received.

I am, Sir, yours truly,

DUM SPIRO SPERO.

October, 1878.

Mr. Courtney Pope. — The harm done by the circulation of these pamphlets is exceedingly great, and it is high time some decided action were taken in the matter.

Enquirer will find an article on "Warburg's Tincture" in THE LANCET of November 13th, 1875.

THE CONTAGIOUS DISEASES ACTS.

To the Editor of THE LANCET.

SIR,—Since the notice appeared, which you were kind enough to insert for me in THE LANCET of the 19th inst., I have received numerous applications for the Rev. E. P. Grant's Parliamentary paper. I have in all cases sent copies by the next ensuing post, and trust that all have been received. Should any, however, have miscarried, I shall have much pleasure in sending another copy on application. I shall also be glad to send to any who may have failed to see the notice.

It may interest many of your readers to learn that the Town Council of Exeter, at a recent meeting, resolved unanimously to use every effort to secure for that city the benefits of these Acts.

I am, Sir, yours &c.,

FRED. W. LOWNDES.

62, Mount-pleasant, Liverpool, Oct. 28th, 1878.

M.D.—It is scarcely justifiable to supply a patient with a solution of morphia and a hypodermic syringe. Serious warnings have already occurred. Chloral gradually loses its strength by being kept, whether in solution or not, unless kept well stoppered. The smell is due to free chloral being given off; but probably this takes place very slowly. The solution should not be kept longer than about a fortnight.

DISLOCATION OF BOTH ENDS OF THE HUMERUS IN THE SAME SUBJECT.

To the Editor of THE LANCET.

SIR,—A few weeks ago a case appeared in your journal of dislocation of the hip and (supposing the diagnosis was correct) dislocation of the wrist in the same patient. This brought to my mind a case which has never to my knowledge been reported, and which, in my opinion, I unique—i. e., one of dislocation of both ends of the same bone, th humerus, in the same subject.

In 1852 I was house-surgeon to the Royal Berkshire Hospital, and on taking a holiday left an accomplished deputy in my place. He admitted a man, of the age of fifty-six, with a dislocation backwards of the radius and ulna, consequently forwards of the humerus, and reduced the displacement.

On Sept. 4th of the same year I was seeing out-patients for the surgeon of the case, and saw this man. He complained of stiffness of the shoulder. This was seven weeks after the accident which caused the displacement, and which consisted in a blow on the back of the upper arm from the rapidly-revolving handle of a crane. I examined his shoulder, and, to my intense disgust, found the head of the humerus under the pectoral muscle. Chloroform was at that time rather timidly used, so it will interest your younger readers to know that Sir A. Cooper's manœuvring treatment was adopted—viz., grain and half-grain doses of tartar emetic administered every ten minutes, while pulley extension was kept up in the then proper directions. At the end of half an hour of this treatment the head of the bone returned into its natural situation with a snap, but again resumed its abnormal position. This on more than one occasion was repeated. We, however, got over the difficulty by bandaging the arm to the side, and the man made a good recovery, having been discharged on Sept. 25th, with the following report: "Upward movements, which were faulty, improving." I may mention that this result—viz., the reduction of the dislocation—was obtained when the poor fellow was reduced to the most extreme degree of weakness by the drug.

The case seems to me interesting and worth reporting on three accounts—1stly, the time that had elapsed before reduction; 2ndly, the success of the Astley Cooper plan of nauseating a patient to death's door; and 3rdly, but mainly, on account of the fact that the two ends, upper and lower, of the same bone were displaced by the one blow, and the whole humerus carried bodily forwards, the upper end on to the ribs from its scapular attachment, and the lower on to the radius and ulna from its attachments to these bones. Such a case I have not seen or read of.

I remain, Sir, yours truly,

WM. W. MOXHAY,
Surgeon, Royal Berks Hospital.

Reading, Oct. 23rd, 1878.

Mr. S. W. Sherwood.—The treatment was quite right. Fresh air, so long as draughts are avoided, is essential in poisoned rooms. The throat affection was, doubtless, simply a part of the disease.

J. Q. — Medicine: Watson, Niemeyer, Roberts or Bristowe. Medical Anatomy: Sibson. Public Health: Parkes or Wilson. Psychological Medicine: Blandford and Maudsley.

SURVIVAL AFTER ELEVEN DAYS' FASTING.

To the Editor of THE LANCET.

SIR,—I wish to report a case which happened on board the Inman R.M.S. *City of Chester* during the last voyage, just completed, which will, I think, be of interest to you and your readers.

On the 24th September we sailed from Liverpool for New York. On the 4th October we arrived at the latter port. On the evening of arrival the stevedores removed the hatches, and found beneath them a young man insensible. He was brought on deck, and revived sufficiently to swallow tea, with milk, beef-tea, and weak iced brandy-and-water, which were administered to him in two and three drachm doses. The first time only after swallowing he vomited. He was conveyed to St. Vincent's Hospital an hour and forty minutes after discovery. He was then much emaciated, cold, and nearly pulseless, but gave his name before leaving the ship (James Donnelly, aged twenty, riveter, of Dumbarton, Scotland). I visited him daily at the hospital during our stay, 4th to 9th October, and on the evening of the 9th the house-surgeon considered him out of danger. His story is that he stowed away the evening before sailing (23rd September). He had nothing to eat or drink the whole voyage. He found some salt in the hold, of which he ate about two handfuls. He had in his pocket a small glass flask, empty; from this he drank his urine each time he voided it. He felt hungry only on the second day; after that intense thirst for four days, during which time he shouted for four or five hours each day, thinking he might be heard. He then became insensible, and remembered nothing till he woke up in the hospital. The treatment there was continued which was begun on board-ship, with the addition of wrapping the body in warm blankets, and the application of warm bottles to his feet. On the second day after admission he received an injection of castor oil and soap-suds, which was followed by only a very slight dejection. The third day the injection was repeated with a satisfactory result, and on the fifth day he had a natural evacuation, from which time he was given milk-punch with bread soaked in it.

I have put the main points before you; but, should you wish it, I will forward you a copy of the deposition which I, in company with the house-surgeon, took at his bedside. It is, I think, the longest period of fasting, after which recovery took place, on record—eleven days.

I remain, Sir, faithfully yours,

T. MACLOGHLIN, L.R.C.S. Ed., &c.,
Surgeon in Charge.

Liverpool, Oct. 24th, 1878.

THE PONTYPRIDD RAILWAY ACCIDENT.

ONE or two newspaper letters on the Medical and Surgical Aspects of this accident have been sent to us, which seem to call for notice; but before making any comment we must have the whole of the newspaper letters before us. Will our correspondent kindly send us the rest of them?

Non-Medicus.—The material, not the colour.

LIME-JUICE.

To the Editor of THE LANCET.

SIR,—Referring to your article of October 12th on Lime-juice and Lemon-juice, and the difficulties which attend their preservation and administration as liquids, I would respectfully draw your attention to the lime-fruit-juice biscuits invented and patented by Dr. Campbell Morfit, and manufactured by Messrs. Carr and Co., of Carlisle. In the preparation of these biscuits the Montserrat lime-juice is sweetened and converted into a jelly by means of gelatine, and this jelly is then mixed with wheaten biscuit reduced to powder. The mixture, which is like damp saw-dust, is then compressed into cakes, which are dried at a temperature of about 100° Fahr. The constitutional water of the lime-juice is evaporated, leaving the therapeutic virtues of the juice intact and unaffected, sheathed in the gelatine, which also serves to bind the biscuit particles together.

Biscuits thus prepared have been kept for more than a year in loosely covered boxes, and the lime-juice when washed out and analysed has been found as fresh as on the day of incorporation. I do not make this assertion unwarranted, but on the evidence of Mr. Wanklyn, who testifies: "I have investigated the gelatine fruit stock, and also biscuits charged with lime-fruit-juice, which had been kept for a year, and find that the citric acid remains unchanged. All these products contain the fresh lime-juice condensed by the elimination of water, but otherwise unchanged and in its natural condition."

It must be evident to everyone that in such biscuits we have a practical solution of the difficulty of the storage and administration of lime-juice, whether in polar or tropical regions. Every sailor might have his daily allowance in a biscuit. Dr. Morfit's biscuits have been submitted to the Board of Trade; and, whilst their value has been confessed, it seems it would be necessary to alter an Act of Parliament ere they could be accepted as an equivalent for liquid lime-juice in the merchant service. Thus it is that even good laws in time come to operate as obstructions to improvement.

Your obedient servant,

Chancery-lane, October, 1878. ANDREW GLENDINNING.

To the Editor of THE LANCET.

SIR,—In reference to your article on Lime-juice and Lemon-juice on the 12th inst., and our previous correspondence, you will excuse us again troubling you on the matter. Since your article appeared we have seen several shipmasters, and they all state that they have great difficulty in getting the men to take their lime-juice, owing to the muddy appearance of the article; hence in a matter of this sort surely the best obtainable should be the order of the day. We gather from your article that the only objections you have are *expense*, and a *doubt* whether, when deprived of its pulpy matter, it is any better. In reference to expense, it is very trifling, not amounting to 20s. in a 2000-ton ship; and as to the latter, we have sent you a sample of the *pulp*, which we have taken from the juice, and which you will find on analysis to contain no citric acid, except an infinitesimal quantity, nor, we venture confidently to assert, a single one of the constituents which render lime-juice so valuable an antiscorbutic—a fact from your article of August 31st you readily admit.

Yours truly,

Liverpool, Oct. 29th, 1878. EVANS, SONS, AND CO.

Mr. L. L. Palmer.—There are no trustworthy agents. Our correspondent should look at the advertising columns of *The Times* or *Shipping Gazette*, and write to the owners or agents of the line or liner that he prefers, giving references, age, and previous experience.

CARBOLIC ACID IN SMALL-POX.

To the Editor of THE LANCET.

SIR,—Referring to recent correspondence in your columns on the subject of carbolic acid as an *external* application in small-pox, permit me to draw attention to the fact of its having been employed *internally*, with apparently great benefit, in the same disease.

In THE LANCET of January 23rd, 1869, Mr. Keith, of Normanby, wrote, eulogising the therapeutical effects of carbolic acid in scarlatina, measles, and small-pox. During the hot season of that year a young surgeon, Mr. D. M'Ewen, in medical charge of the battery of artillery stationed at Saugor, in Central India, where I was also located, was induced to try it in a severe case of small-pox in the person of one of the battery officers, aged twenty-eight, and whose constitution had been much enfeebled by scurvy. Mr. M'Ewen administered the drug in the way recommended by Mr. Keith, as follows:—Carbolic acid, acetic acid, tincture of opium, chloric ether, of each one drachm; water to eight ounces: a tablespoonful to be taken every four hours. Mr. M'Ewen was much pleased with the result. Twelve hours after the exhibition of the first dose, or after taking the third, the patient lost his restlessness, and fell into a comfortable sleep. There was no secondary fever, and the case ended most favourably. Mr. M'Ewen had further experience of the apparent efficacy of carbolic acid in producing similar results in other cases of small-pox, where the attacks were, he thought, cut short; and, as the facts seemed to be worthy of record, I, with Mr. M'Ewen's permission, published them in the *Indian Medical Gazette* for August, 1869.

Faithfully yours,

Sutton, Surrey, Oct. 22nd, 1878. C. R. FRANCIS, M.B.

ROYAL COLLEGE OF SURGEONS OF ENGLAND: DENTAL EXAMINATIONS.

THE following were the questions submitted to the candidates at the written examination for the Licence in Dental Surgery of the Royal College of Surgeons of England on the 29th ult., when all the candidates, six in number, were successful:—

Anatomy and Physiology.

1. What bones enter into the composition of the chest, and how are they articulated with each other?
2. Describe the course and mechanism of the circulation of the blood through the body generally, and through the lungs.

Pathology and Surgery.

1. Explain how death may be caused by the inhalation of chloroform, and what steps you would take to avert a fatal result, if threatened.
2. What are the pathological changes which occur in the formation and healing of an acute abscess (e. g., of the tonsil)?

Dental Anatomy and Physiology.

1. Describe the nature of a tooth-germ, and the mode of its formation; and also the sources of origin of the germs of the different permanent teeth.
2. Explain the terms "monophyodont," "diphyodont," "homodont," and "heterodont," illustrating them by reference to comparative dentition.
3. Describe specimens 1, 2, and 3, under the microscope.

Dental Surgery and Pathology.

1. What is salivary calculus? Give its chemical composition; state where it is usually deposited, and its effects.
2. What are the varieties of fracture to which the teeth are liable? State the consequences that may arise from them respectively, and the necessary treatment.
3. Give a full description of supernumerary teeth, and of the treatment to be pursued in respect of them.

Mr. D. Ainley.—The matter referred to will be found in the Appendix (pp. 228-39) to the Registrar-General's thirty-ninth Annual Report, published by Messrs. Eyre and Spottiswoode, Queen's Printers, of East Harding-street, Fetter-lane, London, E.C.

MEDICAL ADVERTISING IN AUSTRALIA.

"JOS. C. VERCO, M.D. Lond., F.R.C.S., B.S., L.R.C.P., &c., lately house-physician at St. Bartholomew's Hospital, London, and midwifery assistant. Consultations: Victoria-square, 11 to 12 A.M.; 3 to 4 P.M. Hindmarsh—Monday and Thursday, 1.30 to 2.30; Tuesday, Wednesday, Friday, and Saturday, 9 to 10 A.M. At home, Wellington-square, North Adelaide, 6 to 7 P.M. Free vaccination."

If advertising cannot be altogether prevented in the colonies, surely it should not be practised by a graduate of London and an ex-house-physician of St. Bartholomew's Hospital. Dr. Verco must know that both his university and his hospital will blush to see one of their *alumni* so acting.

BULBAR PARALYSIS.

To the Editor of THE LANCET.

SIR,—In Mr. Robinson's notes of a very interesting case of bulbar paralysis, which appeared in your issue of October 19th, he seems to take it too much for granted that such cases are absolutely incurable. In this respect I must beg to differ from him, and to assure him that this is by no means the case. In the Clinical Society's Transactions, vol. ix., he will find a case of bulbar paralysis which came under my care, and completely yielded to treatment; and I have another case under treatment which is decidedly retrogressive. Dr. Silver has reported such a case in the Medico-Chirurgical Society's Transactions, and Kussmaul, of Strasburg, has reported several. I quite agree with Mr. Robinson that medicines are less potent in this than in many other forms of paralysis; but artificial, highly nutritious feeding from an early period will be found invaluable.

Your obedient servant,

THOMAS STRETCH DOWSE, M.D., &c.

Old Burlington-street, W., October, 1878.

THE EUCALYPTUS GLOBULUS.

To the Editor of THE LANCET.

SIR,—Will you allow me to correct a slight error into which the writer of the annotation on Eucalyptus Globulus has been led, doubtless, by the author of the article in the *Popular Science Review*. It is stated that the meaning of *eucalyptus* is "well-concealed" (equivalent to "well-hidden"), whereas the term means simply "well-covered." The idea of concealment is seldom, if ever, associated with the words built on the radical, καλυπτ, but only that of covering or wrapping up. On the other hand, the notion of secrecy is probably conveyed by the root κρυπτ, as in *cryptogamous*. "Well-concealed" would, therefore, be correctly expressed by *eucryptus* only. On these points see Curtius, "Grundzuge d. Griech. Etymologie"; or Gaisford, "Etymologicon Magnum," sub vocibus.

Your obedient servant,

Finsbury-square, Oct. 26th, 1878. GORDON HOLMES.

THE BRUSSELS M.D.

To the Editor of THE LANCET.

SIR,—I should be very much obliged if some of your readers who may have obtained the above degree would kindly inform me what are the books generally read for that examination, and to whom is application to be made for particulars concerning the examination.

Yours &c.,

October 29th, 1878. SURGEON.